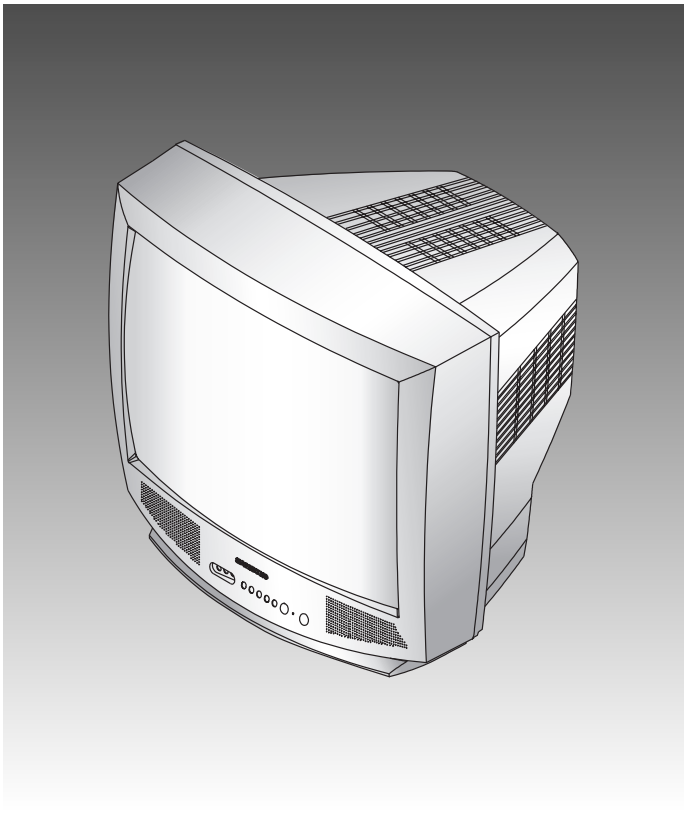
SAMSUNG

COLOR TELEVISION RECEIVER

Chassis : **KS1B(N)(REV.1)**
Model : **CM27001SDX/KMT, CM27001SDS/KMT**

SERVICE Manual

COLOR TELEVISION RECEIVER



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1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1):
   Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

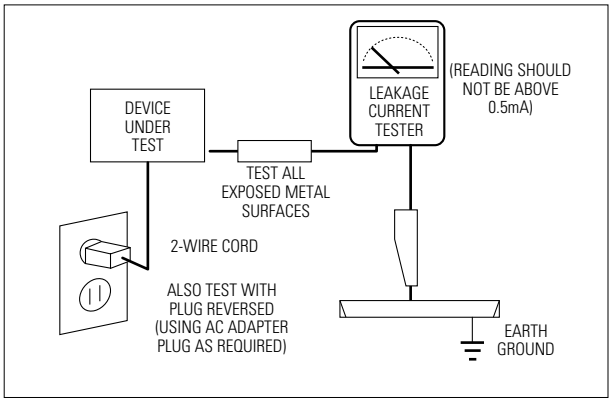
DEVICE UNDER TEST
LEAKAGE CURRENT TESTER
(READING SHOULD NOT BE ABOVE 0.5mA)
TEST ALL EXPOSED METAL SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

Fig. 1-1 AC Leakage Test

6. Antenna Cold Check:
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.

7. X-ray Limits:
   The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.

8. High Voltage Limits:
   High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced. (X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

   Heed the high voltage limits. These include the X–ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

1-1 Safety Precautions (Continued)

9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

10. Design Alteration Warning:
    Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

11. Hot Chassis Warning:
    Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

    To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.

12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.

13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.

14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.

15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

16. Picture Tube Implosion Warning:
    The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.

17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.

18. Product Safety Notice:
    Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.

    Components that are critical for safety are indicated in the circuit diagram by shading, (⚡) or (⚠).
    Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications.
    A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.
Warning2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.

2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.

3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.

4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.

5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).

6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.

7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

8. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

2. Immediately before handling any semicon ductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power—this is an electric shock precaution.)

3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.

4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.

5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.

6. Use only an anti-static solder removal device. Many solder removal devices are not rated as “anti-static”; these can accumulate sufficient electrical charge to damage ESDs.

7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.

8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.

9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

2. Specifications and IC Data

2-1 Specifications

Television System:

MODEL	SYSTEM
CT	NTSC ONLY

Channels:

System / Band	NTSC
VHF	2 - 13
UHF	14 - 69
CABLE	1 - 125

Intermediate Frequencies (MHz) :

SYSTEM / IF Carrier Frequency	NTSC
Picture IF Carrier	45.75
Sound IF Carrier	41.25
Color Sub Carrier	42.18

Picture Tube:

29 Inch A68QDN891X001	29Inch 1.0R, +380MG

Power Requirements: AC 120V, 60Hz

Antenna Input Impedance: VHF, UHF : Telescopic dipole antenna (75 ohm unbalanced type)

Speaker Impedance 8 ohm, 5W+5W (Dual Type)

2-2 IC Line Up

Table 2-1 IC Line-Up

Loc. No	Specification	Description	Remark
IC201S	SPM426AN	TDA9387, English/Spanish/French	Philips
IC301	LA7845	VERTICAL OUTPUT	Sanyo
IC501	TDA6107Q	RGB DRIVE AMP	Philips
IC602	TDA8944	SOUND-AMP (5W x 2CH)	Philips
IC801S	KA5Q1265R	POWER IC (STR)	FIAIR CHILD
IC802	KA7632	CUSTOM REGULATOR (5V, 8V, 3.3V)	SEC
IC202	24C04	EEPROM	
PC801S	TCET1108 / LTV817B	PHOTO COUPLER	
IC101	U4468B	SIF - IC	TEMIC
IC601	MSP3440G	Sound Processor	Micronas

2-3 Semiconductor Base Diagrams

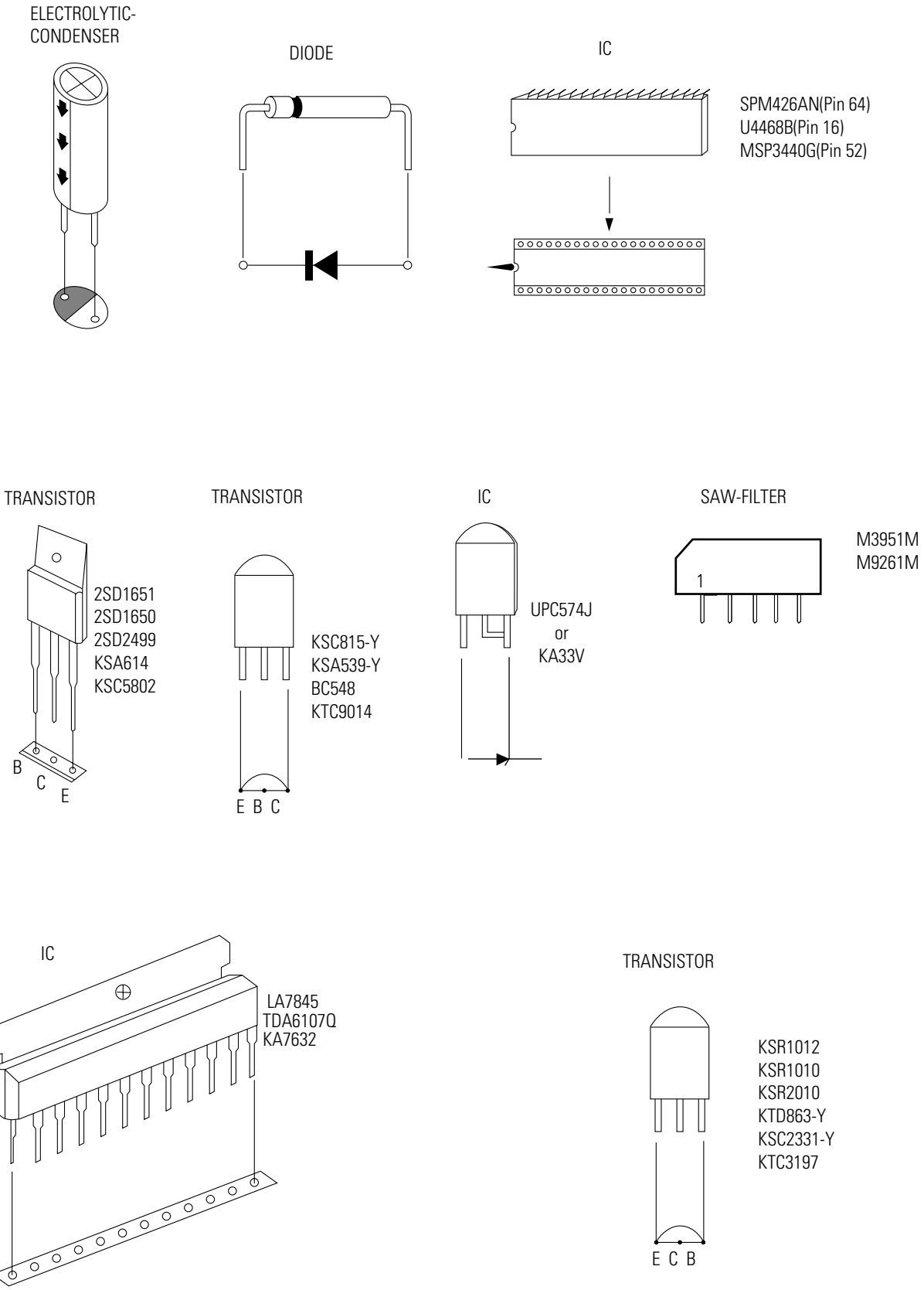

Fig. 2-1 Semiconductor Base Diagrams

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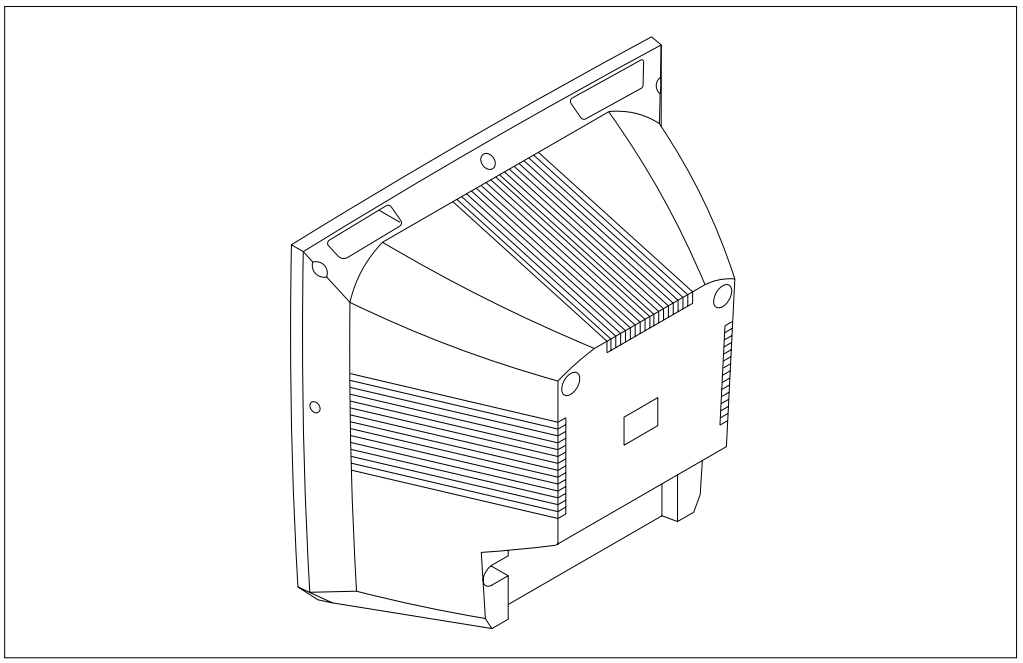
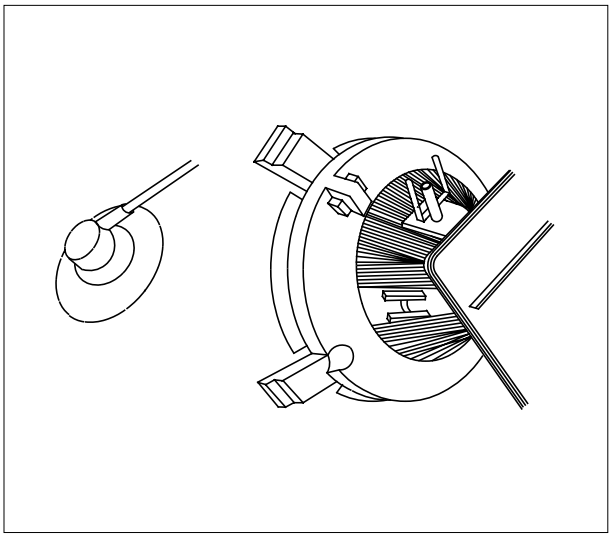
3. Disassembly and Reassembly

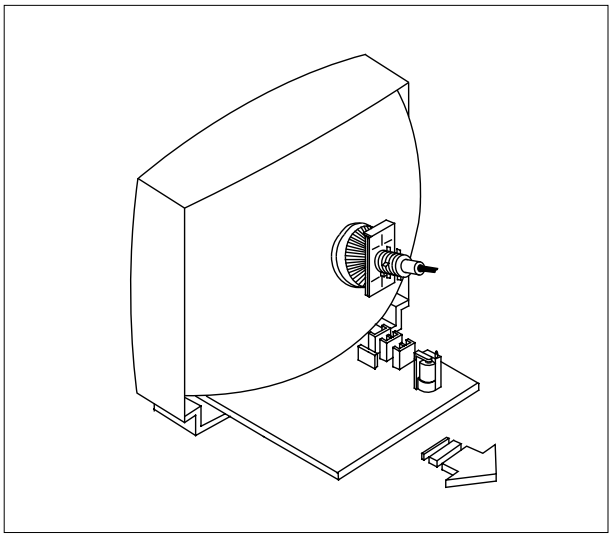
3-1 Back Cover Removal



1. After removing the screws, press the tension rib and pull the cabinet backwards.
2. To reassemble, press the tension rib (see diagram).

3-2 Main Board Removal

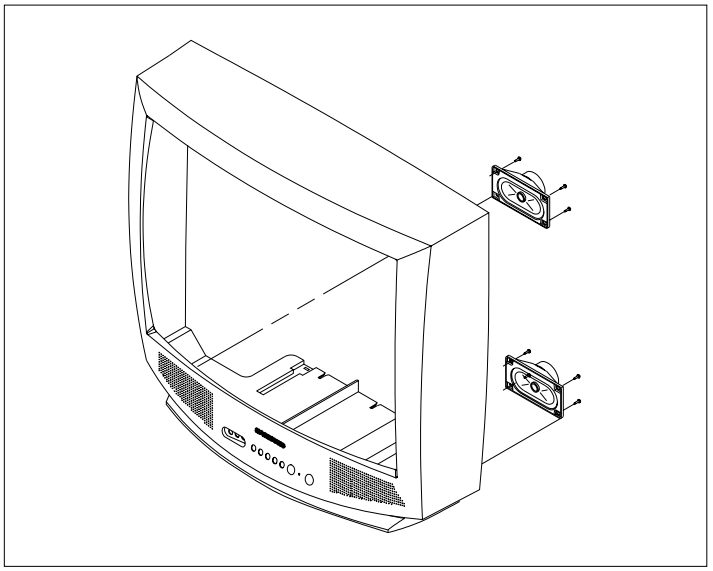




1. Separate the socket board from the CRT neck.
2. Remove the Anode Cap from the CRT.
3. Remove the main board by pulling it with both hands.

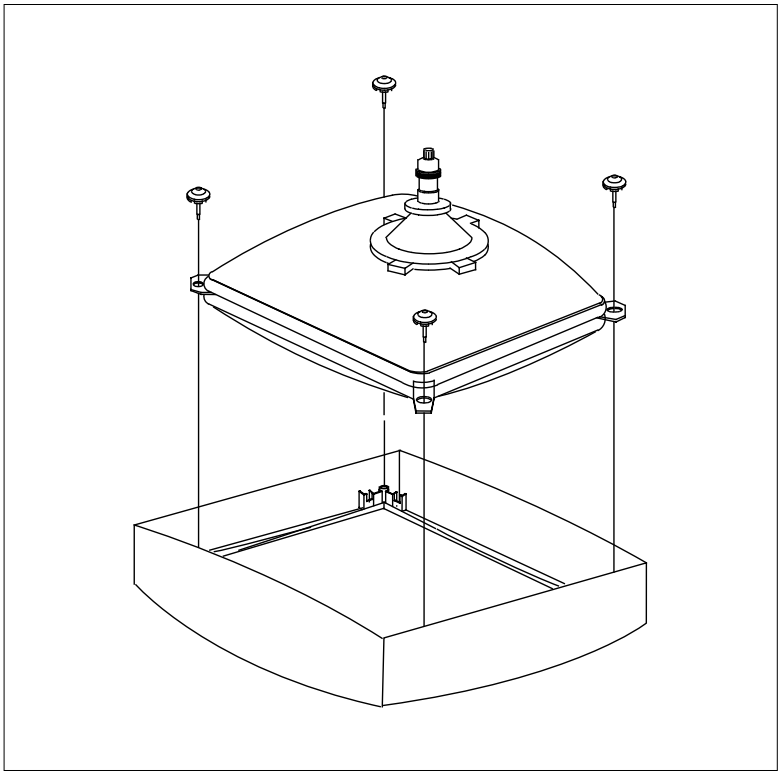
Warning: The FBT is charged with high voltage.
Before removing the Anode Cap, discharge the voltage through one of the heat sinks on the main board.

3-3 Speaker Removal



1. Remove the speaker by pressing the tension rib.

3-4 CRT Removal



1. Spread a soft mat on the floor. Place the TV set face down.

2. Remove the 4 nuts mounting the CRT to the front cabinet. Lift the CRT.

3. Caution: Because of the high vacuum and large surface area of the picture tube, be careful while handling it: (1) Always lift the picture tube by grasping it firmly around the faceplate, (2) Never lift the tube by its neck. (3) Do not scratch the picture tube or apply excessive pressure. Fractures of the glass may cause an implosion.

MEMO

4. Alignment and Adjustments

4-1 Preadjustment

4-1-1 Factory Mode

1. Do not attempt these adjustments in the Video Mode.

2. The Factory Mode adjustments are necessary when either the EEPROM (IC202) or the CRT is replaced.

3. Do not tamper with the “Adjustment” screen of the Factory Mode menu. This screen is intended only for factory use.

4-1-2 When EEPROM (IC202) Is Replaced

1. When IC202 is replaced all adjustment data revert to initial values. It is necessary to re-program this data.

2. After IC202 is replaced, warm up the TV for 10 seconds.

4-1-3 When CRT Is Replaced

1. Make the following adjustments AFTER setting up after setting up purity and convergence :

   White Balance
   Sub-Brightness
   Vertical Center
   Vertical Size
   Horizontal Size
   Fail Safe (This adjustment must be the last step).

2. If the EEPROM or CRT is replaced and set SC as 30(factory mode).

4-2 Factory/Service Mode

4-2-1 Procedure for the “Adjustment” Mode

1. This mode uses the standard remote control. The Service Mode is activated by entering the following remote-control sequence :

   (1) DISPLAY → FACTORY.

   (2) STAND-BY → MUTE → 1 → 8 → 2 →POWER ON.

2. The “SERVICE (FACTORY)” message will be displayed. The Service Mode has four components: ADJUST, OPTION , G2-ADJUST and RESET.

3. Access the Adjustment Mode by pressing the “VOLUME” keys (Up or Down). The adjustment parameters are listed in the accompanying table, and selected by pressing the CHANNEL keys (▲ , ▼).

4. Selection sequences for the all system:

   DOWN or UP key:

   SCT>SBT>BLR>BLB>RG>GG>BG>VSL>VS>VA>HS>SC>CDL>STT>AKB>PDL>NDL>PSR>NSR>SCBT>VOL>CAP>MVOL>RP00>RP01>FMWS>AGC1>OMD>SCL>PWL>MUS>AGC

5. The VOLUME keys increase or decrease the adjustment values (stored in the non-volatile memory) when Adjustment Mode is cancelled.

6. Cancel the Adjustment Mode by re-pressing the “FACTORY” or “Power OFF” keys.

4-2-2 Main Adjustment Parameter

NO	OSD	FUNCTION	RANGE	INITIAL DATA	SETTING	REMARK
1	SCT	Sub Contrast	0 ~ 23	15	(12)	
2	SBT	Sub Brightness	0 ~ 23	8	(3)	
3	BLR	Black Level offset Red	0 ~ 63	35	(37)	
4	BLB	Black Level offset Blue	0 ~ 63	32	(33)	
5	RG	Red Gain	0 ~ 63	40	(38)	
6	GG	Green Gain	0 ~ 63	25	25	FIX
7	BG	Blue Gain	0 ~ 63	42	(39)	
8	VSL	Vertical Slope	0 ~ 63	30	(32)	
9	VS	Vertical Shift	0 ~ 63	31	31	FIX
10	VA	Vertical Amplitude	0 ~ 63	25	(25)	
11	HS	Horizontal Shift	0 ~ 63	32	(33)	
12	SC	S-Correction	0 ~ 63	30	30	FIX
13	CDL	Cathode Drive Level	0 ~ 15	9	9	FIX
14	STT	Sub Tint	0 ~ 7	3	3	FIX
15	AKB	AKB On / off	0 ~ 1	0	0	FIX
16	PDL	PAL Delay	0 ~ 15	2	2	FIX
17	NDL	NTSC Delay	0 ~ 15	0	0	FIX
18	PSR	PAL Sub color	0 ~ 23	20	20	FIX
19	NSR	NTSC Sub color	0 ~ 23	7	7	FIX
20	SCBT	Screen Brighrtness	0 ~ 63	40	40	FIX
21	VOL	Volume pre setting	0 ~ 63	10	10	FIX
22	CAP	Caption Position	0 ~ 15	12	12	FIX
23	MVOL	Melody Sound Volume	0 ~ 50	7	7	FIX
24	RP00	Ratio Pre / overshoot	0 ~ 1	1	1	FIX
25	RP01	Ratio Pre / overshoot	0 ~ 1	1	1	FIX
26	FMWS	Window Selection Sound PLL	0 ~ 1	0	0	FIX (Mono)
27	AGC1	IF AGC Speed	0 ~ 3	1	1	FIX (Nomal)
28	OMD	Offset IF Demodulator	0 ~ 63	32	32	FIX
29	SCL	Soft Clipping Level	0 ~ 3	3	3	FIX (Off)
30	PWL	Peak White Limitting	0 ~ 15	15	15	FIX (100%)
31	MUS	Matrix USA	0 ~ 1	0	0	FIX (Mono)
32	AGC	Automatic Gain Control	0 ~ 63	27	(27)	

4-2-3 Option Bytes

In the Service Mode, various can be selected via the Option Table. Example:

Option Table : xx xx

	OSD	SETTING	REMARK
1	VIDEO MUTE	OFF	- Video Mute On/Off changing the channel
2	AUDIO	STEREO	- Audio Option (Mono / Steeo)
3	E/W	OFF	- E/W Option
4	ZOOM	NOR/ZOOM	- Picture Size Option
5	AUTO POWER	OFF	- Master S/w Option
6	AUDIO MUTE	ON	- Audio Mute On/ Off without signal
7	LANGUAGE	ENGLISH	- Inital Language agter Factory Reset
8	HOTEL MODE	OFF	- Hotel mode On/ Off
9	BULE SCREEN	OFF	- Bule Screen On/ Off without signal
10	2'nd SIF	INTERNAL	- SIF Option at Mono sound
11	V-CHIP	ON	- V-CHIP On/Off

4-2-4 RESET

The Reset Mode is used during factory inspection.
Function Reset:

1.	Picture Mode	Custom
2.	Sound Mode	Custom
3.	Auto Volume	Off
4.	Melody	On
5.	Surround	Off
6.	Turbo Sound	Off
7.	MTS	Stereo
8.	Language	English
9.	Caption	Off
10.	Timer	Off

4-3 Other Adjustments

4-3-1 General

1. Usually, a color TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.

2. The picture should have good black and white details. There should be no objectionable color shading; if color shading is present, perform the purity and convergence adjustments described below.

3. Use the specified test equipment or its equivalent.

4. Correct impedance matching is essential.

5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.

6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.

7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.

8. To protect against shock hazard, use an isolation transformer.

4-3-2 Automatic Degaussing

A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set has been moved or turned in a different direction, disconnect its AC power for at least 30 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before removing power.

4-3-3 High Voltage Check

CAUTION: There is no high voltage adjustment on this chassis. The B+ power supply must be set to +125 volts (Full color bar input and normal picture level).

1. Connect a digital voltmeter to the second anode of the picture tube.
2. Turn on the TV. Set the Brightness and Contrast controls to minimum (zero beam current).
3. The high voltage should not exceed 30KV.
4. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 30KV under any conditions.

4-3-4 FOCUS Adjustment

1. Input a black and white signal.
2. Adjust the tuning control for the clearest picture.
3. Adjust the FOCUS control for well defined scanning lines in the center area of the screen.

4-3-5 Cathode Voltage Adjustment (Screen Adjustment)

1. Connect CRT socket pin GK to an oscilloscope probe.
2. Input a gray scale pattern. (Use a pattern generator, PM5518)
3. Use the P mode key (on the remote control) for the STANDARD picture.
4. Adjust the Screen VR (on the FBT) so that the voltage on the oscilloscope becomes 125±2.5V (See Fig. 4-1).

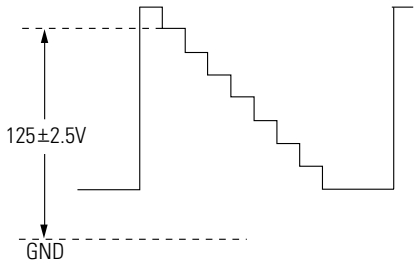


Fig. 4-1

4-3-6 Purity Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Plug in the CRT deflection yoke and tighten the clamp screw.
3. Plug the convergence yoke into the CRT and set in as shown in Fig. 4-2.
4. Input a black and white signal.
5. Fully demagnetize the receiver by applying an external degaussing coil.
6. Turn the CONTRAST and BRIGHTNESS controls to maximum.
7. Loosen the clamp screw holding the yoke. Slide the yoke backward or forward to provide vertical green belt. (Fig. 4-3).
8. Tighten the convergence yoke.
9. Slowly move the deflection yoke forward, and adjust for the best overall green screen.
10. Temporarily tighten the deflection yoke.
11. Produce blue and red rasters by adjusting the low-light controls. Check for good purity in each field.
12. Tighten the deflection yoke.

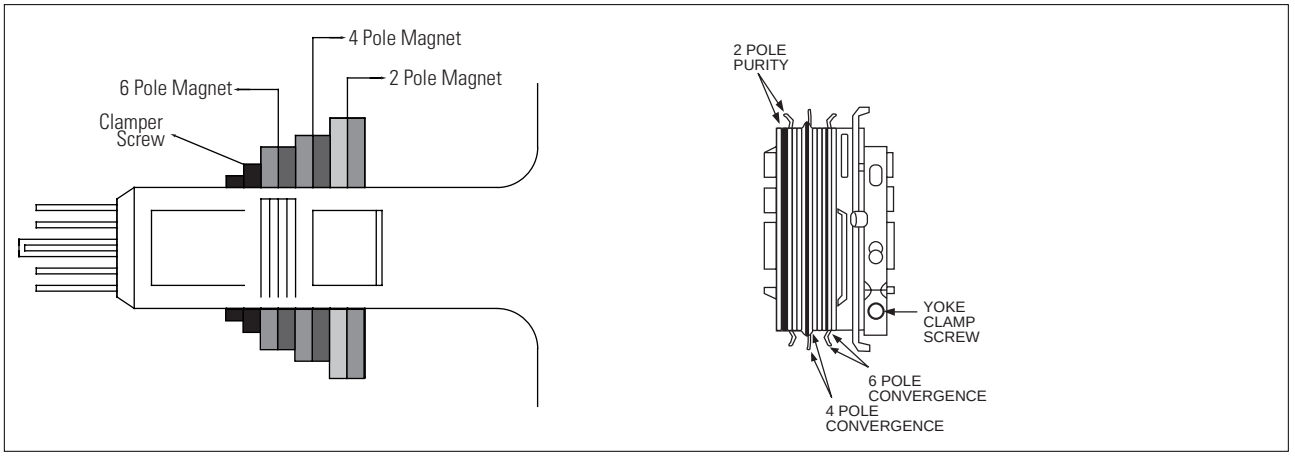


Fig. 4-2 Convergence Magnet Assembly

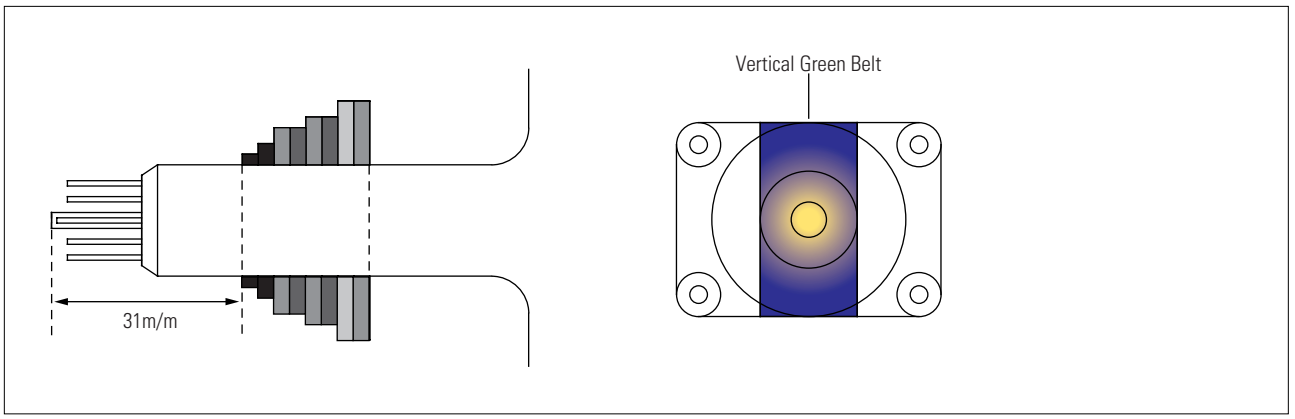


Fig. 4-3 Center Convergence Adjustment

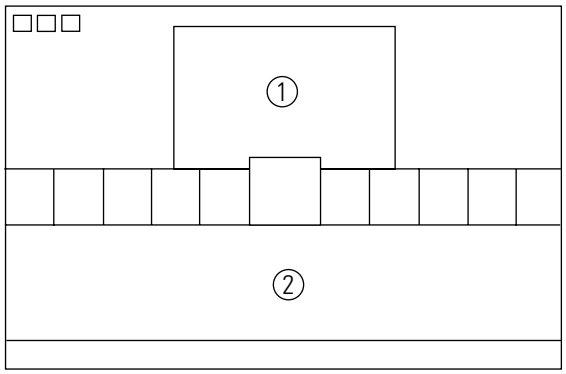


Fig. 4-4

4-3-7 White Balance Adjustment

(a) Set up

1. Warm up the TV for at least 30 minutes in the Aging Mode (OSD White). This mode is displayed by entering the following sequence:

   DISPLAY →FACTORY → FACTORY

2. Input a Toshiba pattern.

(b) Low-Light Adjustment

1. Set SBT to 1.0 fL in the Factory Service Mode with using CA100. See Fig. 4-4.

2. Adjust RG,BG so that the levels are suitable to each local area.

(c) High-Light Adjustment

1. Set SCT to 35 FL in the Factory Service Mode with using CA100.
   See Fig. 4-4 .

4-3-8 Center Convergence Adjustment

1. Warm up the receiver for at least 20 minutes.

2. Adjust the two tabs of the 4 pole magnets to change the angle between them. Superimpose the red and blue vertical lines in the center area of the screen.

3. Adjust the Brightness and Contrast controls for a well defined picture.

4. Adjust the two-tab pairs of the 4 pole magnets, and change the angle between them. Superimpose the red and the blue vertical lines in the center area of the screen.

5. Turn the both tabs at the same time, keeping the angle constant, and superimpose the red and blue horizontal line in the center of the screen.

6. Adjust the two-tab pairs of the 6-pole magnets to superimpose the red and blue line onto the green. (Changing the angle affects the vertical lines, and rotating both magnets affects the horizontal lines.)

7. Repeat adjustments 2~6, if necessary.

8. Since the 4-pole magnets and 6-pole magnets interact, the dot movement is complex (Fig. 4-5).

Fig. 4-5 Center Convergence Adjustment

4-3-9 RF AGC Adjustment

Set the AGC data to 27 (Factory Mode).

4-3-10 Sub-Color Adjustment

Set $\begin{matrix}\text{PSR}\\\text{NSR}\end{matrix}$ data to $\begin{matrix}20\\7\end{matrix}$ (Factory Mode).

4-3-11 Geometry Adjustment

SC →VS→VA→VSL→HS

1. Input a lion head pattern.
2. Set the SC (S-Correction) as 30 and VS(Vertical Shift) 31 so that the lion head circle becomes oval.
3. Adjust with VA (Vertical Amplitude) so that the top margin of the picture is 4.

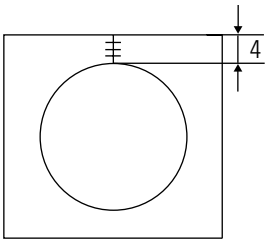


Fig. 4-7

4. Adjust with VSL (Vertical-Slope) so that the bottom margin of the picture is 4.

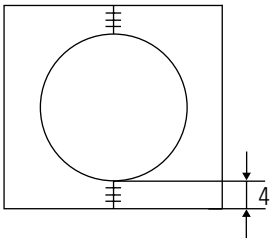


Fig. 4-8

5. Adjust with HS (Horizontal Shift) so that the lion-head pattern and CRT centers are aligned.

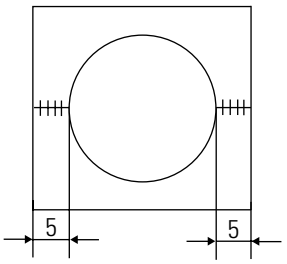
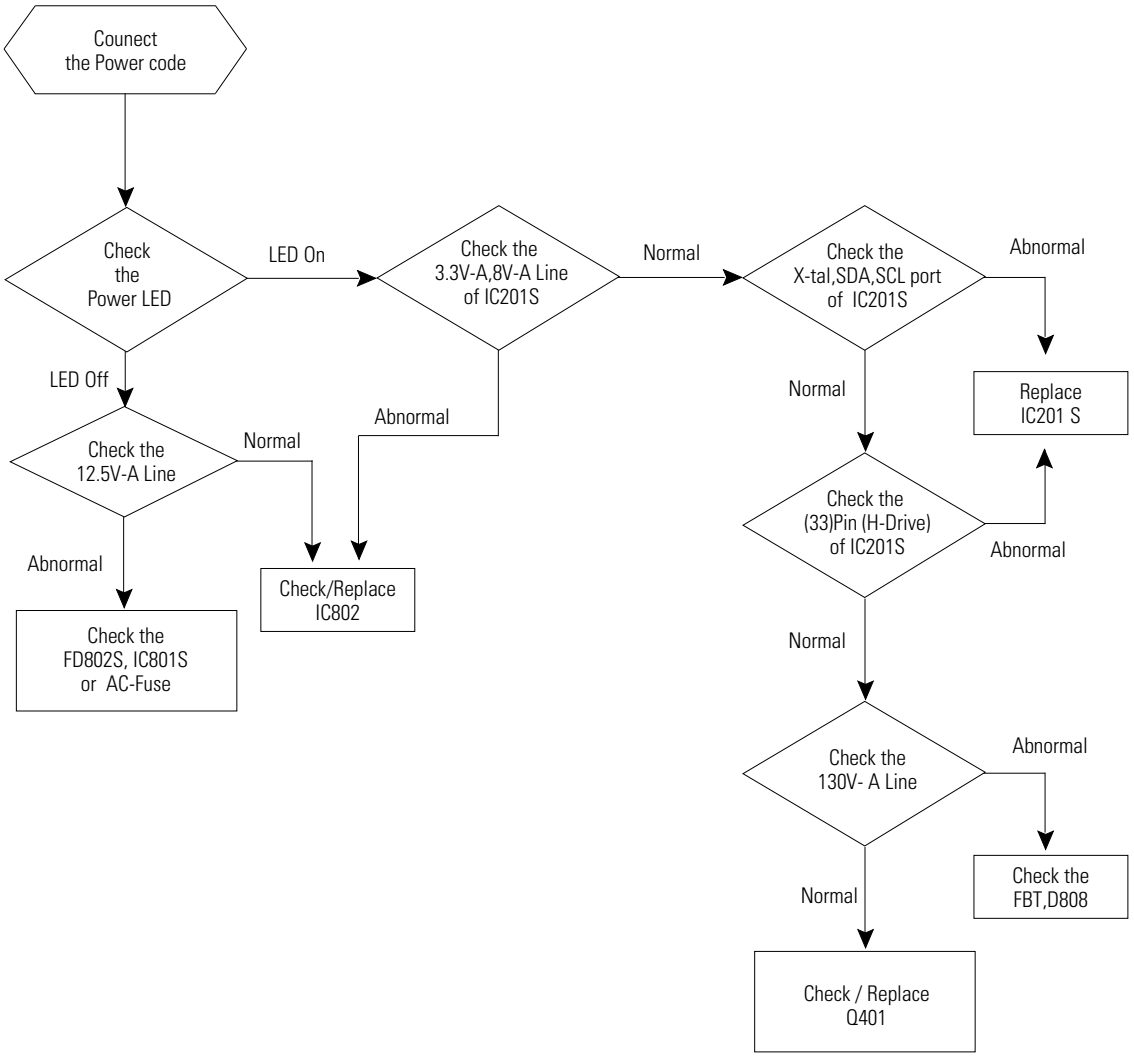


Fig. 4-9

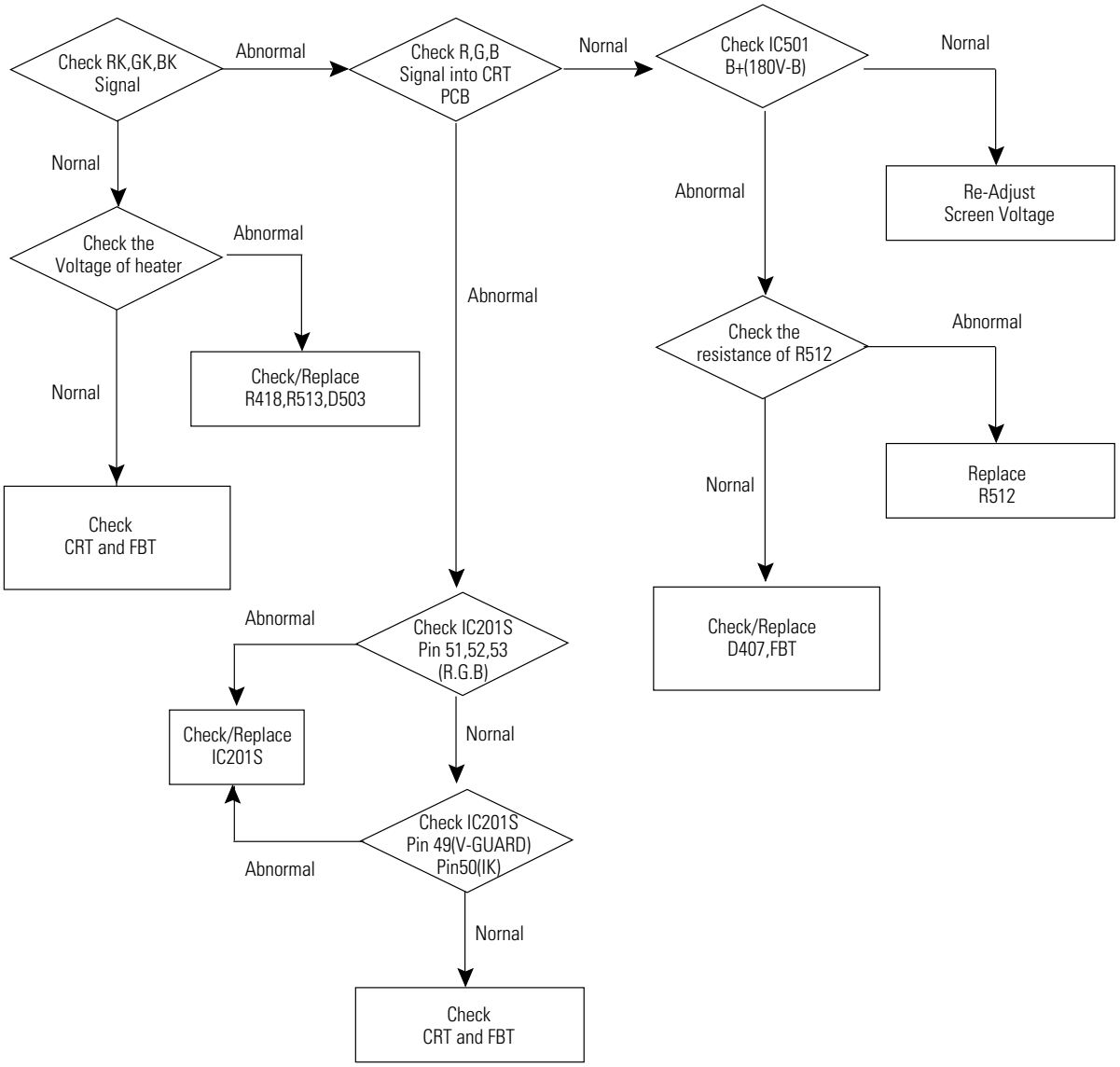
6. Adjust HS (Horizontal Shift) so that the left and right margins of the picture are 5.

5. Troubleshooting

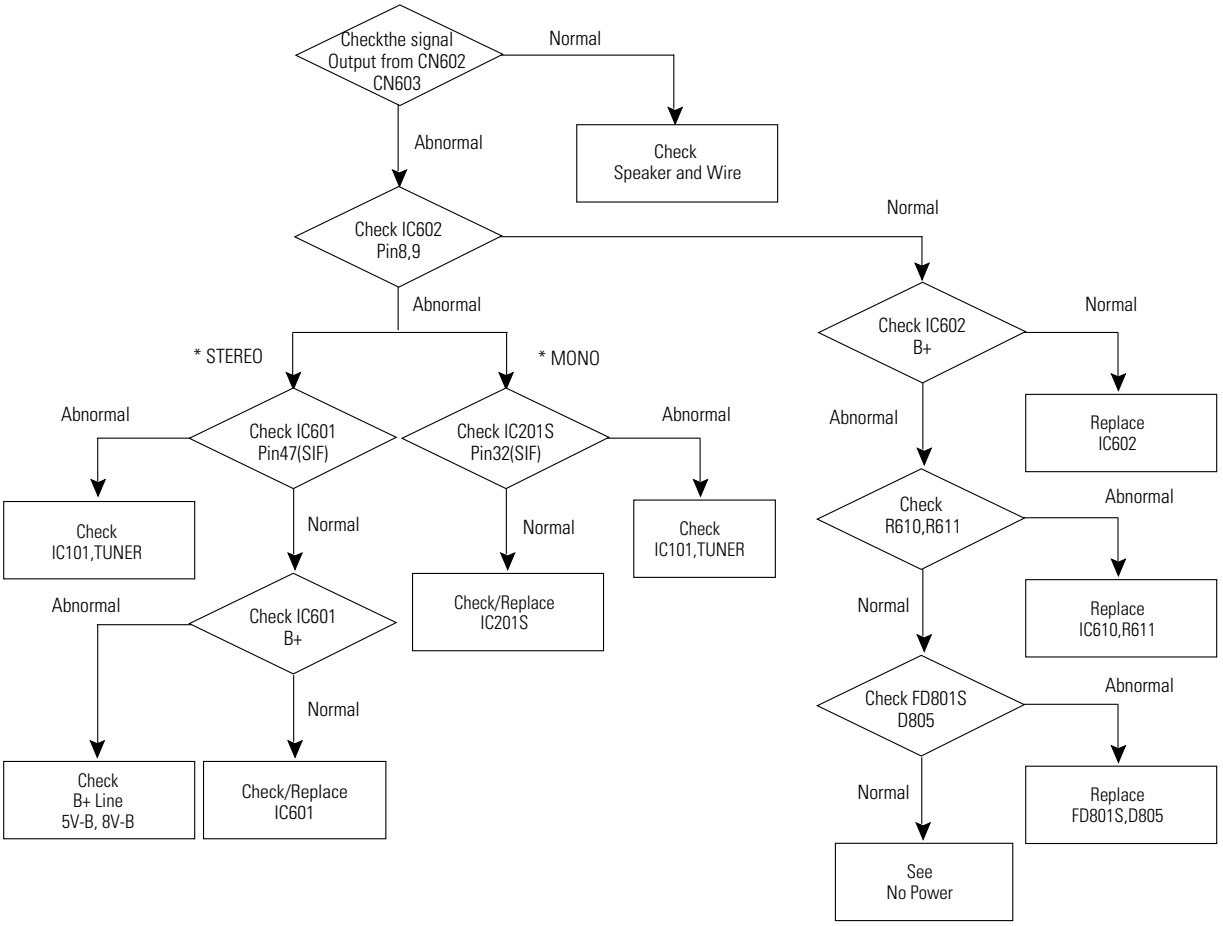
5-1 No Power



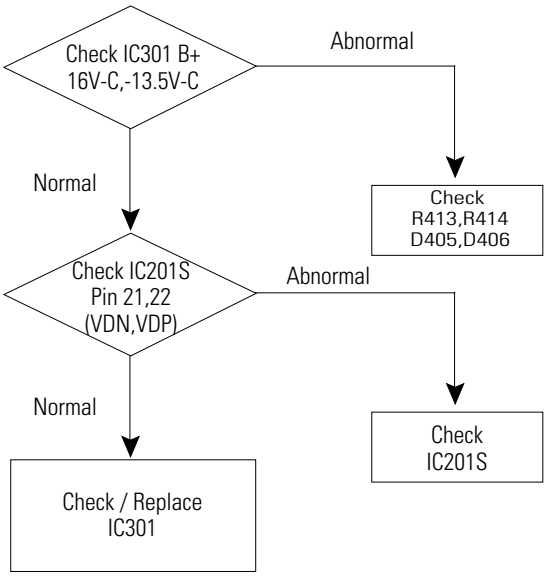
5-2 No Video (Sound OK)



5-3 No Sound (Video OK)

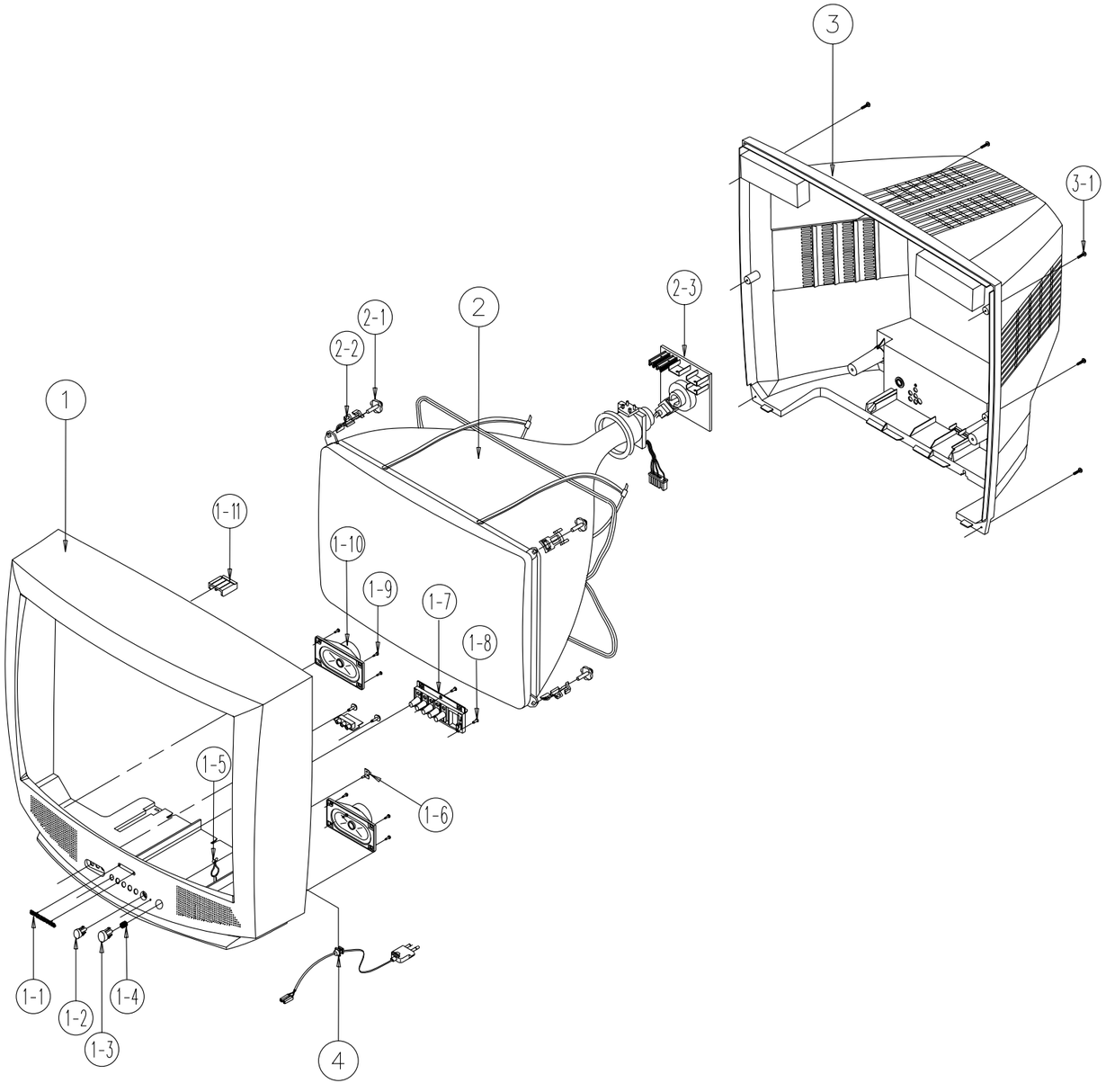


5-4 Horizontal Lines Appear or Screen



6. Exploded View & Parts List

6-1 CM27001SDX/KMT, CM27001SDS/KMT



No	Code No	Description;Specification	Q'ty	Remark
1	AA92-00553D	ASSY CABINET FRONT;CM27001SDS/KMT	1	
	AA64-31148A	CABINET-FRONT;683B,HIPS,-,-,-,V0,BLK,-	1	
1-1	AA64-02281A	BADGE-BRAND;27V,AL FORGING,SILVER,C/MATH	1	
1-2	AA64-40472A	WINDOW-REMOCON;-,683B,-,ABS,HB,LG 41338,	1	
1-3	AA64-10733A	KNOB-POWER;683B,ABS,-,-,-,HB,BLK,-,-	1	
1-4	AA61-60003J	SPRING-CS;-,SUS304,-,-,OD6,N7,OD6,-,-,-,	1	KNOPOW
1-5	AA65-30105A	CLAMP-WIRE;ALL MODEL,NYLON 66,V2,-,NTR,1	1	
1-6	AA64-40473A	INDICATOR-LED;683B,PMMA,-,CLEAR,HB,-,-	1	
1-7	AA64-10732A	KNOB-CONTROL;683B,ABS,-,-,-,HB,BLK,-,-	1	
1-8	6003-001026	SCREW-TAPTITE;RH,+,B,M4,L15,ZPC(BLK),SWR	2	KC+CF
1-9	6003-001026	SCREW-TAPTITE;RH,+,B,M4,L15,ZPC(BLK),SWR	8	SPK+CF
1-10	3001-001071	SPEAKER;5W,8ohm,90dB,180Hz	2	
1-11	AA61-40010B	BOSS-WING;-,HIPS,-,-,-,BLK,V0	1	
2	AA03-00147A	CRT COLOR;A68QDN891X001,29,1.0R,42.5%,+3	1	
2-1	AA60-10050R	SCREW-ASSY;-,SWRCH18A,M5,L31.5,HH,+,WC,-	4	CRT+CF
2-2	AA65-30113A	CLAMP-D,COIL;-,NYLON 66,V2,-,BLK,TVI 25~	4	D-COIL
2-3	3704-001105	SOCKET-CRT;11P,20PI,26.5PI,NI,-	1	V999S
3	AA64-31149A	CABINET-BACK;683B,HIPS,-,-,-,V0,BLK,-	1	
3-1	AA60-10050T	SCREW-TAPPING;-,SWRCH18A,M4,L20,RH,+,2S,	7	CB+CF
4	AA96-20129A	ASSY-POWER,CORD;-,EP2/YES,H/C300,ME301P,	1	

7. Electrical Parts List

7-1 CM27001SDX/KMT, CM27001SDS/KMT

Loc. No.		Code No.	Description ; Specification	Remark

ASSY PCB CHASSISPACK

1	*	AA93-00174A	ASSY PCB CHASSISPACK;,KS1B,CM27001SDS/KM	
..2		AA90-00136R	ASSY-PACKING,PCB;KS2,3A,T/W,KS1B ALL,ALL	S.N.A
...3	CHASIS	AA69-01403A	WRAP VINYL-PACKING;SKD CHASSIS,LDPE,T0.0	S.N.A
..2		AA94-03680D	ASSY PCB MAIN(OPT);CM27001SDS/KMT,KS1B	
...3	C803	2401-001387	C-AL;470uF,20%,250V,GP,BK,25.4x40,1	
⚠ ...3	IC201S	AA09-00218A	IC MICOM;TDA9387PS/N2H-OTP,CM27001,64P,3	
⚠ ...3	IC301	AA96-00623A	ASSY H/S;-,POWER,AA62-00056A,LA7845	S.N.A
....4		0205-000129	GREASE-SILICON;SC102,JAPAN	S.N.A
....4		1204-000517	IC-VERTICAL DEF.;LA7845,SIP,7P,-,PLASTIC	
....4		6003-000334	SCREW-TAPTITE;RH,+,2S,M3,L6,ZPC(YEL),SWR	S.N.A
....4		AA62-00056A	HEAT SINK-PS;-,-,T1.0,-,41*35*70,D2,-,-	S.N.A
...3	IC602	AA96-00244G	ASSY H/S;-,AUDIO,AA62-00046A,TDA8944J,BR	S.N.A
....4		AA62-00046A	HEAT SINK-PS;-,-,T1.0,-,D1(DREAM) 60X25X	S.N.A
....4		AA61-10162B	BRACKET-IC;-,SBHG-1,T1.0,-,-,-,100	S.N.A
....4		6003-000335	SCREW-TAPTITE;RH,+,2S,M3,L8,ZPC(YEL),SWR	S.N.A
....4		1201-001741	IC-AUDIO AMP;TDA8944J,DBS,17P,937MIL,DUA	
....4		0205-000129	GREASE-SILICON;SC102,JAPAN	S.N.A
⚠ ...3	IC801S	AA96-50373H	ASSY H/S;-,POWER,AA62-30181K,5Q1265RT	S.N.A
....4		0205-000129	GREASE-SILICON;SC102,JAPAN	S.N.A
....4		1203-002257	IC-PWM CONTROLLER;5Q12656RT,TO-220F-5L,5	
....4		6003-000333	SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	S.N.A
....4		AA62-30181K	HEAT-SINK,ES;-,AL6063 EXTR.,2,WHT,40MM,-	S.N.A
⚠ ...3	IC802	AA96-00245A	ASSY H/S;-,-,AA62-00055A,KA7632,-	S.N.A
....4		1203-001939	IC-POSI.FIXED REG.;7632,SIP,10P,-,PLASTI	
....4		AA62-00055A	HEAT SINK-PS;-,-,T1.0,-,35*15*25,D1,-,-	S.N.A
....4		6003-000334	SCREW-TAPTITE;RH,+,2S,M3,L6,ZPC(YEL),SWR	S.N.A
...3	JA701	3722-001428	JACK-PIN;6P/9P,3.4mm,NI,BLK,-	
⚠ ...3	LR401S	AA27-30003S	COIL-LINEARLITY;-,54uH,YL81DR14x15,0.12m	
...3	Q401	AA96-00624B	ASSY H/S;-,POWER,AA62-00057A,KSC5802,K-M	
....4		AA62-00057A	HEAT SINK-PS;-,-,T1.0,-,41*20*60,D2,-,-	S.N.A
....4		AA60-30001A	WASHER-PLATE;M3,ID3.5,15X8.5,T1.0,-,SBHG	S.N.A
....4		6003-000333	SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	S.N.A
....4		0502-001191	TR-POWER;KSC5802D,NPN,60000mW,TO-3P,ST,1	
....4		0205-000129	GREASE-SILICON;SC102,JAPAN	S.N.A
⚠ ...3	T444S	AA26-00013A	TRANS-FLYBACK;-,FUH-29A001A(S),29,130V	
⚠ ...3	T801S	AA26-00044E	TRANS SWITCHING;,CS21S5T,80~280V,PM5,PL5	
...3		AA39-00046F	LEAD CONNECTOR-ASSY;,1P,JUMPER,BLK,200MM	
...3		AA39-20604A	LEAD CONNECTOR-ASSY;,5/4P,YBNH250-09,YBN	
...3		AA99-30231R	ASSY-PCB ROBOT; AA94-03680D ,ER	S.N.A
....4	C821	2401-003633	C-AL;220UF,20%,160V,GP,ST,22X25MM,10	
⚠ 4	CR402S	2301-001037	C-FILM,PPF;6.8nF,3%,1600V,TP,29x10x18,20	
⚠ 4	CR403S	2306-000253	C-FILM,MPPF;7.2nF,5%,1.6KV,TP,28.5x18.5x	
⚠ 4	CR406S	2306-000204	C-FILM,MPPF;430nF,5%,400V,TP,26x20.5x12.	
⚠ 4	CX801S	2306-000318	C-FILM,MPPF;220nF,20%,250V,TP,-,22.5mm	
⚠ 4	CX802S	2306-000318	C-FILM,MPPF;220nF,20%,250V,TP,-,22.5mm	
⚠ 4	CY801S	2201-000446	C-CERAMIC,DISC;3.3nF,20%,400V,Y5U,TP,15x	
⚠ 4	D801S	0402-001082	DIODE-BRIDGE;RBV406LFB,600V,4A,-	
⚠ 4	D808	0402-001358	DIODE-RECTIFIER;FFPF10U60S,600V,10A,TO-2	
⚠ 4	FP801S	3601-001012	FUSE;250V,4A,SLOW-BLOW,GLASS,5.2x20mm	
....4	IC101	1204-001583	IC-IF CIRCUIT;U4468B,DIP,16P,-,PLASTIC,5	
....4	IC202	1103-001209	IC-EEPROM;AT24C04-PC27 C,512Kx8Bit,DIP,8	
....4	IC501	AA96-50311A	ASSY-H/S;-,VIDEO,AA62-30175D,TDA6107Q,-	S.N.A
.....5		1201-001159	IC-VIDEO AMP;6107,ZSIP,9P,-,SINGLE,-,PLA	
.....5		6003-000334	SCREW-TAPTITE;RH,+,2S,M3,L6,ZPC(YEL),SWR	S.N.A
.....5		AA62-30175D	HEAT-SINK,PS;-,SECC,T1.0,-,33X15X30 FT-2	S.N.A
....4	IC601	1204-001594	IC-SOUND PROCESSOR;MSP3440G-B6,SDIP,52P,	
....4	L808	AA27-00098A	COIL CHOKE;-,-,24uH,10%,-,0.1,3.0A,DR10X	
....4	LD201	AA96-00555A	ASSY LED GUIDE;-,-,UEX-LD-030,GREEN	S.N.A
⚠ 4	LX801S	AA29-30002F	FILTER-LINE NOISE;-,6mH,2.45A,-,-	
⚠ 4	NT802S	1404-001045	THERMISTOR-NTC;4.7ohm,15%,2900K,35.0mW,T	
⚠ 4	PC801S	0604-001038	PHOTO-COUPLER;TR,130-260%,200mW,DIP-4,ST	
⚠ 4	PT801S	1404-001246	THERMISTOR-PTC;1.5OHM,+30/-20,110V,140VA	
⚠ 4	RL801S	3501-001040	RELAY-POWER;12VDC,500mW,10A,1FormA,15mS,	
....4	RM201	AA59-60001U	MODULE-REMOCON;-,ORC-50VF/SR-12V,38KHz,9	
⚠ 4	SF101S	2904-000287	FILTER-SAW AV;45.75MHz,SIP5K,ST,14dB,M/N	
⚠ 4	SF103S	2904-001255	FILTER-SAW AV;45.75MHz,SIP5K,ST,12.2dB,M	
....4	SW201	3404-001004	SWITCH-TACT;12V,50mA,160gf,8.4x22.7mm,SP	
⚠ 4	T401A	AA26-50001R	TRANS-HORIZ.DRIVE;-,-,-,80MH,-,-,520UH,-	
⚠ 4	TU01S	AA40-00088A	TUNER;TAEC-H005F(F),NTSC,181CH,45.75MHZ,	
⚠ 4	V999S	3704-001105	SOCKET-CRT;11P,20PI,26.5PI,NI,-	
....4		AA99-10225D	ASSY-PCB MAIN,AUTO; AA99-30231R ,V	S.N.A
.....5	C101	2401-000962	C-AL;22uF,20%,50V,GP,TP,5x11,5	
.....5	C102	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
.....5	C103	2401-002594	C-AL;220uF,20%,16V,GP,TP,8x11.5,5	
.....5	C104	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
.....5	C105	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5	C106	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
.....5	C108	2202-000127	C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V	
.....5	C109	2202-000127	C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V	
.....5	C110	2202-000127	C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V	
.....5	C114	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
.....5	C115	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5	C116	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
.....5	C117	2401-000027	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
.....5	C118	2401-000027	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
.....5	C120	2202-000127	C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V	
.....5	C127	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
.....5	C201	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5	C203	2202-000127	C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V	
.....5	C204	2305-000411	C-FILM,MPEF;470nF,5%,50V,TP,7.3x4.8x5.5m	
.....5	C205	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3	
.....5	C206	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5	C207	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5	C208	2201-000573	C-CERAMIC,DISC;0.047nF,5%,50V,NP0,TP,5x3	
.....5	C209	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5	C210	2201-000573	C-CERAMIC,DISC;0.047nF,5%,50V,NP0,TP,5x3	
.....5	C211	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5	C212	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
.....5	C213	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
.....5	C218	2305-000411	C-FILM,MPEF;470nF,5%,50V,TP,7.3x4.8x5.5m	
.....5	C219	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5	C220	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5	C221	2202-000849	C-CERAMIC,MLC-AXIAL;18pF,5%,50V,CH,TP,3.	
.....5	C222	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5	C223	2202-000632	C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP	
.....5	C225	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
.....5	C226	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5	C227	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5	C229	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5	C231	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
.....5	C232	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5	C233	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5	C234	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11,5	
.....5	C235	2301-000342	C-FILM,PEF;2.2nF,5%,50V,TP,7.4x3.9x13mm,	
.....5	C236	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
.....5	C237	2301-000445	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
.....5	C238	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11,5	
.....5	C239	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
.....5	C240	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5	C241	2401-000758	C-AL;220nF,20%,50V,GP,TP,5x11,5	
.....5	C242	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3	
.....5	C243	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3	
.....5	C244	2309-000138	C-FILM,PE-PPF;100nF,5%,50V,TP,20x16x8.5,	
.....5	C245	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm,5	
.....5	C247	2401-000962	C-AL;22uF,20%,50V,GP,TP,5x11,5	
.....5	C248	2202-000829	C-CERAMIC,MLC-AXIAL;.82NF,10%,50V,Y5P,TP	
.....5	C249	2301-000445	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
.....5	C253	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
.....5	C301	2301-000254	C-FILM,PEF;39nF,5%,50V,TP,7.5x3.5x6.5mm,	
.....5	C302	2201-000247	C-CERAMIC,DISC;0.015nF,5%,50V,NP0,TP,5x3	
.....5	C303	2401-000360	C-AL;100uF,20%,50V,GP,TP,8x11.5,5	

Loc. No.	Code No.	Description ; Specification	Remark
.....5 C304	2401-000326	C-AL;100uF,20%,35V,GP,TP,8x11.5,5	
.....5 C305	2305-000285	C-FILM,MPEF;220NF,5%,100V,TP,10.5X5.5X15	
.....5 C306	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5	
.....5 C401	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
.....5 C402	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5 C403	2201-000599	C-CERAMIC,DISC;0.56nF,10%,500V,Y5P,TP,5.	
.....5 C404	2305-000382	C-FILM,MPEF;4.7nF,5%,400V,TP,-,5mm	
.....5 C405	2201-000639	C-CERAMIC,DISC;0.68nF,10%,2kV,Y5P,TP,9x5	
.....5 C407	2401-002268	C-AL;2.2uF,20%,250V,LZ,TP,8X11,5	
.....5 C408	2201-000556	C-CERAMIC,DISC;0.47nF,10%,500V,Y5P,TP,5.	
.....5 C409	2401-001397	C-AL;470uF,20%,25V,GP,TP,10x16,5	
.....5 C410	2401-001397	C-AL;470uF,20%,25V,GP,TP,10x16,5	
.....5 C411	2201-000556	C-CERAMIC,DISC;0.47nF,10%,500V,Y5P,TP,5.	
.....5 C412	2401-000927	C-AL;22uF,20%,250V,GP,TP,13x20,5	
.....5 C413	2201-000556	C-CERAMIC,DISC;0.47nF,10%,500V,Y5P,TP,5.	
.....5 C414	2301-001065	C-FILM,MPPF;47nF,5%,630V,TP,19x15.5x7,7.	
.....5 C504	2301-001259	C-FILM,MPPF;100nF,5%,400V,TP,19x8x16,7.5	
.....5 C505	2202-000825	C-CERAMIC,MLC-AXIAL;680pF,10%,50V,Y5P,TP	
.....5 C506	2401-000430	C-AL;10uF,20%,250V,GP,TP,10x16mm,5m	
.....5 C507	2401-001232	C-AL;4.7uF,20%,250V,GP,TP,10x12.5,5	
.....5 C508	2201-000723	C-CERAMIC,DISC;4.7nF,20%,3KV,Y5U,TP,16x5	
.....5 C601	2201-000304	C-CERAMIC,DISC;0.001nF,0.25pF,50V,NP0,TP	
.....5 C602	2201-000304	C-CERAMIC,DISC;0.001nF,0.25pF,50V,NP0,TP	
.....5 C603	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
.....5 C604	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5 C605	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3	
.....5 C606	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5 C607	2401-000493	C-AL;10uF,20%,50V,LZ,TP,5x11mm,5mm	
.....5 C608	2401-000027	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
.....5 C609	2401-000027	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
.....5 C610	2401-001026	C-AL;3.3UF,20%,50V,GP,TP,5X11,5	
.....5 C611	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5 C612	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5 C613	2301-000108	C-FILM,PEF;1.5nF,5%,50V,TP,6.5x3.0x5.5mm	
.....5 C614	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11,5	
.....5 C615	2401-000493	C-AL;10uF,20%,50V,LZ,TP,5x11mm,5mm	
.....5 C616	2401-000493	C-AL;10uF,20%,50V,LZ,TP,5x11mm,5mm	
.....5 C617	2401-000493	C-AL;10uF,20%,50V,LZ,TP,5x11mm,5mm	
.....5 C618	2301-000108	C-FILM,PEF;1.5nF,5%,50V,TP,6.5x3.0x5.5mm	
.....5 C619	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5 C620	2401-001026	C-AL;3.3UF,20%,50V,GP,TP,5X11,5	
.....5 C621	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
.....5 C622	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
.....5 C623	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
.....5 C625	2401-001998	C-AL;1000uF,20%,25V,GP,TP,10x20,5mm	
.....5 C626	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5 C627	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
.....5 C628	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
.....5 C629	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
.....5 C630	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
.....5 C631	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
.....5 C632	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
.....5 C633	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
.....5 C638	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5 C639	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5 C640	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11,5	
.....5 C641	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11,5	
.....5 C801	2201-000332	C-CERAMIC,DISC;2.2nF,20%,250V,Y5U,TP,9x4	
.....5 C802	2201-000332	C-CERAMIC,DISC;2.2nF,20%,250V,Y5U,TP,9x4	
.....5 C804	2401-001192	C-AL;33uF,20%,50V,GP,TP,6.3x11,5	
.....5 C805	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm,5	
.....5 C806	2301-000235	C-FILM,PEF;3.9nF,5%,50V,TP,6.5x3.0x5.5mm	
.....5 C807	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
.....5 C808	2301-001435	C-FILM,PPF;1.5nF,5%,1.2kV,TP,15x8x12.5mm	
.....5 C809	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
.....5 C810	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
.....5 C811	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5 C812	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11,5	
.....5 C813	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5 C814	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5 C815	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5	
.....5 C816	2201-000599	C-CERAMIC,DISC;0.56nF,10%,500V,Y5P,TP,5.	
.....5 C817	2401-000703	C-AL;2200uF,20%,25V,GP,-,12.5x25mm,	
.....5 C818	2201-000599	C-CERAMIC,DISC;0.56nF,10%,500V,Y5P,TP,5.	
.....5 C819	2401-001998	C-AL;1000uF,20%,25V,GP,TP,10x20,5mm	
.....5 C820	2201-000991	C-CERAMIC,DISC;0.56nF,10%,2kV,Y5P,TP,7.5	
.....5 C822	2401-000262	C-AL;100uF,20%,160V,HR,TP,16x25,7.5	
.....5 C823	2201-000370	C-CERAMIC,DISC;0.22nF,10%,50V,Y5P,TP,4x3	
.....5 C824	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm,5	
.....5 C825	2401-002300	C-AL;47uF,20%,50V,GP,TP,6.3x11,5	
.....5 CN602	3711-002643	CONNECTOR-HEADER;BOX,4P,1R,2.5mm,STRAIGH	
⚠ 5 CR01S	2201-000556	C-CERAMIC,DISC;0.47nF,10%,500V,Y5P,TP,5.	
⚠ 5 CR02S	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
⚠ 5 CR03S	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
⚠ 5 CR405S	2201-000132	C-CERAMIC,DISC;0.1nF,10%,500V,Y5P,TP,6.5	
.....5 D206	0401-000005	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
.....5 D208	2701-000211	INDUCTOR-AXIAL;68uH,10%,2.5x3.4mm	
.....5 D303	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
.....5 D304	0401-000005	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
.....5 D401	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L	
.....5 D402	0402-001321	DIODE-RECTIFIER;1A4G,400,1A,R-1,TP	
.....5 D403	0402-001321	DIODE-RECTIFIER;1A4G,400,1A,R-1,TP	
.....5 D405	0402-000534	DIODE-RECTIFIER;RG10V,400V,1.2A,DO-201,T	
.....5 D406	0402-000540	DIODE-RECTIFIER;RU20A,600V,1.5A,-,TP	
.....5 D407	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
.....5 D501	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,	
.....5 D502	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,	
.....5 D503	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,	
.....5 D504	0402-000010	DIODE-RECTIFIER;RGP15G,400V,1.5A,DO-204A	
⚠ 5 D801	0402-001111	DIODE-RECTIFIER;1N5397GP,600V,1.5A,DO-20	
⚠ 5 D802	0402-000254	DIODE-RECTIFIER;RGP10J,600V,1A,DO-41,TP	
⚠ 5 D803	0401-000005	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
⚠ 5 D804	0401-000005	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
⚠ 5 D806	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L	
⚠ 5 D807	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L	
⚠ 5 D809	0401-000005	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
.....5 D951	0402-001321	DIODE-RECTIFIER;1A4G,400,1A,R-1,TP	
⚠ 5 DR01S	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
⚠ 5 DR02S	0403-001321	DIODE-ZENER;MTZJ6.8C,6.66-7.01V,500mW,DO	
⚠ 5 DR03S	0401-000005	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
.....5 DZ101	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ201	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ204	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ205	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ206	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ207	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ209	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ210	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ211	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ212	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ213	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ214	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ215	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ216	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ220	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ221	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ301	0403-001328	DIODE-ZENER;MTZJ22A,20.15-21.20V,500mW,D	
.....5 DZ302	0403-001329	DIODE-ZENER;MTZJ24B,22.61-23.77V,500mW,D	
.....5 DZ303	0403-001221	DIODE-ZENER;UZ39BSB,35.36-37.19V,500MW,D	
.....5 DZ305	0403-001328	DIODE-ZENER;MTZJ22A,20.15-21.20V,500mW,D	
.....5 DZ306	0403-000700	DIODE-ZENER;TZP33A,33V,31-35V,1W,DO-41,T	
.....5 DZ402	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ403	0403-001322	DIODE-ZENER;MTZJ8.2B,7.78-8.19V,500mW,DO	
.....5 DZ501	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ502	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ503	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ504	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ601	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ602	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ801	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
.....5 DZ802	0403-000699	DIODE-ZENER;TZP27B,27V,27-30.8V,1W,DO-41	
.....5 DZ803	0403-000716	DIODE-ZENER;MTZJ4.7B,4.7V,4.55-4.8V,500m	
.....5 DZ804	0403-001327	DIODE-ZENER;MTZJ18A,16.22-17.06V,500mW,D	
.....5 DZ805	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ806	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ807	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
.....5 DZ808	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
.....5 DZ809	0403-001317	DIODE-ZENER;MTZJ3.0B,3.01-3.22V,500mW,DO	
.....5 DZ810	0403-001319	DIODE-ZENER;MTZJ4.7C,4.68-4.93V,500mW,DO	
.....5 DZ811	0403-000700	DIODE-ZENER;TZP33A,33V,31-35V,1W,DO-41,T	
.....5 DZ812	0403-000714	DIODE-ZENER;MTZJ3.3B,3.3V,3.32-3.53V,500	
.....5 F801A	3602-000114	FUSE-HOLDER;-,-,30mohm	
.....5 F801B	3602-000114	FUSE-HOLDER;-,-,30mohm	
⚠ 5 FD801S	3601-001163	FUSE-AXIAL LEAD;125V,7A,-,EPOXY,2.4X7.1M	S.N.A

Loc. No.	Code No.	Description ; Specification	Remark
⚠ 5 FD802S	3601-001163	FUSE-AXIAL LEAD;125V,7A,-,EPOXY,2.4X7.1M	S.N.A
.....5 IC604	1203-000515	IC-VOL. DETECTOR;7042,TO-92,3P,177MIL,PL	
⚠ 5 IC803	1203-001217	IC-POSI.ADJUST REG.;431,TO-92,3P,4.58MIL	
.....5 J415	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,	
.....5 L101	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
.....5 L102	2701-000159	INDUCTOR-AXIAL;22uH,10%,4.2x9.8mm	
.....5 L103	2701-000202	INDUCTOR-AXIAL;560nH,10%,2.5x3.4mm	
.....5 L104	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
.....5 L202	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5x3.4mm	
.....5 L203	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5x3.4mm	
.....5 L204	2702-000142	INDUCTOR-RADIAL;22uH,5%,6x6.4mm	
.....5 L205	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
.....5 L206	2701-000215	INDUCTOR-AXIAL;8.2uH,10%,2.5x3.4mm	
.....5 L209	2701-000159	INDUCTOR-AXIAL;22uH,10%,4.2x9.8mm	
.....5 L210	2701-000142	INDUCTOR-AXIAL;1uH,10%,2.5x3.4mm	
.....5 L211	2701-000142	INDUCTOR-AXIAL;1uH,10%,2.5x3.4mm	
.....5 L212	2701-000158	INDUCTOR-AXIAL;22uH,10%,2.5x3.4mm	
.....5 L303	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,	
.....5 L304	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,	
⚠ 5 L401	2701-000142	INDUCTOR-AXIAL;1uH,10%,2.5x3.4mm	
.....5 L402	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,	
⚠ 5 L403	2901-000297	FILTER-EMI ON BOARD;-,3A,-,-,3.5x5,TP,-	
.....5 L501	2901-000297	FILTER-EMI ON BOARD;-,3A,-,-,3.5x5,TP,-	
.....5 L601	2701-000169	INDUCTOR-AXIAL;3.9uH,10%,2.5x3.4mm	
.....5 L602	2701-000169	INDUCTOR-AXIAL;3.9uH,10%,2.5x3.4mm	
.....5 L603	2701-000169	INDUCTOR-AXIAL;3.9uH,10%,2.5x3.4mm	
.....5 L801	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,	
.....5 L802	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,	
.....5 L804	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,	
.....5 L805	2901-000297	FILTER-EMI ON BOARD;-,3A,-,-,3.5x5,TP,-	
.....5 L806	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,	
.....5 L807	2901-000297	FILTER-EMI ON BOARD;-,3A,-,-,3.5x5,TP,-	
.....5 L809	3301-001223	CORE-FERRITE BEAD;AA,62ohm,3.5x0.8x5mm,-	
.....5 LC101	AA26-00144A	TRANS RF;7MG(67MHZ,RH10PF),10PF,67MHZ,7.	
.....5 PCB	AA41-00428B	PCB-MAIN;21K3,FR-1,1L,B,1.6T,330X245,KS1	S.N.A
.....5 Q101	0501-000436	TR-SMALL SIGNAL;KTC3197,NPN,625mW,TO-92,	
.....5 Q203	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,T	
.....5 Q205	0501-000283	TR-SMALL SIGNAL;KSA539,PNP,400mW,TO-92,T	
.....5 Q206	0501-000283	TR-SMALL SIGNAL;KSA539,PNP,400mW,TO-92,T	
.....5 Q207	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,T	
.....5 Q208	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,T	
.....5 Q211	0501-000283	TR-SMALL SIGNAL;KSA539,PNP,400mW,TO-92,T	
.....5 Q402B	0501-000369	TR-SMALL SIGNAL;KSC2331-Y,NPN,1000mW,TO-	
.....5 Q601	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,T	
.....5 Q602	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,T	
.....5 Q603	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,T	
.....5 Q801	0502-000242	TR-POWER;KSA614,PNP,25W,TO-220,TP,40-24	
.....5 Q802	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,T	
.....5 Q951	0501-000369	TR-SMALL SIGNAL;KSC2331-Y,NPN,1000mW,TO-	
⚠ 5 QR01S	0501-000283	TR-SMALL SIGNAL;KSA539,PNP,400mW,TO-92,T	
.....5 R101	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R102	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R104	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R105	2001-000947	R-CARBON;7.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R106	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R107	2001-000325	R-CARBON;120OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R108	2001-000568	R-CARBON;27OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R110	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R111	2001-000793	R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R115	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R136	2001-000924	R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R201	2001-000793	R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R206	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R207	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R208	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R209	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R216	2001-000645	R-CARBON;330KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R217	2001-000857	R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R218	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R222	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R223	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R224	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R225	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R226	2001-000857	R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R228	2001-000010	R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R229	2001-000563	R-CARBON;27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R230	2001-000005	R-CARBON;390ohm,5%,1/8W,AA,TP,1.8x3.2mm	

Loc. No.	Code No.	Description ; Specification	Remark
.....5 R231	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R232	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R244	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R245	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R246	2001-000793	R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R247	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R248	2001-000325	R-CARBON;120OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R249	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R250	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R251	2001-000490	R-CARBON;200OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R256	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R257	2001-000924	R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R258	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R259	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R260	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R261	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R262	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R263	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R264	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R265	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R266	2001-000005	R-CARBON;390ohm,5%,1/8W,AA,TP,1.8x3.2mm	
.....5 R267	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R268	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R269	2001-000005	R-CARBON;390ohm,5%,1/8W,AA,TP,1.8x3.2mm	
.....5 R270	2001-000628	R-CARBON;300OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R271	2001-000628	R-CARBON;300OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R272	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R273	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R274	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R275	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R276	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R277	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R279	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R280	2004-001914	R-METAL;39Kohm,2%,1/8W,AA,TP,1.8x3.5mm	
.....5 R281	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R288	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R289	2001-000397	R-CARBON;180KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R293	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R294	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R295	2001-000739	R-CARBON;4.7MOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R296	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R297	2001-000739	R-CARBON;4.7MOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R305	2004-001371	R-METAL(S);1.5Kohm,1%,1/2W,AA,TP,2.4x6.4	
.....5 R306	2001-000016	R-CARBON(S);10HM,5%,1/2W,AA,TP,2.4X6.4MM	
.....5 R307	2004-001371	R-METAL(S);1.5Kohm,1%,1/2W,AA,TP,2.4x6.4	
.....5 R308	2008-001015	R-FUSIBLE(S);1.5ohm,5%,2W,AF,TP,3.9x10mm	
.....5 R309	2003-002150	R-METAL OXIDE;270OHM,5%,2W,AG,TP,6X16MM	
.....5 R310	2003-002150	R-METAL OXIDE;270OHM,5%,2W,AG,TP,6X16MM	
.....5 R312	2008-001013	R-FUSIBLE(S);1.2ohm,5%,2W,AF,TP,3.9x10mm	
.....5 R401	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R402	2001-001077	R-CARBON(S);150OHM,5%,1/2W,AA,TP,2.4X6.4	
.....5 R403	2001-001199	R-CARBON(S);91OHM,5%,1/2W,AA,TP,2.4X6.4M	
.....5 R404	2001-001114	R-CARBON(S);270OHM,5%,1/2W,AA,TP,2.4X6.4	
.....5 R405	2001-000020	R-CARBON(S);22OHM,5%,1/2W,AA,TP,2.4X6.4M	
.....5 R407	2003-002008	R-METAL OXIDE(S);18Kohm,5%,2W,AF,TP,3.9x	
.....5 R408	2003-000540	R-METAL OXIDE(S);1Kohm,5%,2W,AF,TP,4x12m	
.....5 R413	2008-001011	R-FUSIBLE(S);0.18ohm,10%,2W,AF,TP,3.9x10	
.....5 R414	2008-001011	R-FUSIBLE(S);0.18ohm,10%,2W,AF,TP,3.9x10	
.....5 R416	2004-001402	R-METAL(S);6.8Kohm,1%,1/2W,AA,TP,2.4x6.4	
.....5 R417	2004-001405	R-METAL(S);79Kohm,1%,1/2W,AA,TP,2.4x6.4m	
.....5 R419	2003-001040	R-METAL OXIDE(S);47Kohm,5%,2W,AF,TP,3.9x	
.....5 R420	2003-001040	R-METAL OXIDE(S);47Kohm,5%,2W,AF,TP,3.9x	
.....5 R423	2003-002007	R-METAL OXIDE(S);4.7Kohm,5%,2W,AF,TP,3.9	
.....5 R501H	2002-001009	R-COMPOSITION;2.7Kohm,10%,1/2W,AA,TP,3.7	
.....5 R502H	2002-001009	R-COMPOSITION;2.7Kohm,10%,1/2W,AA,TP,3.7	
.....5 R504	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R505	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R506	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R511	2002-001009	R-COMPOSITION;2.7Kohm,10%,1/2W,AA,TP,3.7	
.....5 R512	2008-000299	R-FUSIBLE(S);47ohm,5%,2W,AF,TP,3.9x10mm	
.....5 R513	2008-000292	R-FUSIBLE(S);3.3ohm,5%,2W,AF,TP,3.9x10mm	
.....5 R514	2001-001062	R-CARBON(S);10MOHM,5%,1/2W,AA,TP,2.4X6.4	
.....5 R601	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R602	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R603	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R604	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R605	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	

Loc. No.	Code No.	Description ; Specification	Remark
.....5 R606	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R607	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R608	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R610	2008-000251	R-FUSIBLE(S);0.27ohm,5%,2W,AF,TP,3.9x10m	
.....5 R611	2008-000251	R-FUSIBLE(S);0.27ohm,5%,2W,AF,TP,3.9x10m	
.....5 R612	2001-000800	R-CARBON;5.1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R613	2001-000006	R-CARBON;2.4KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R614	2001-000006	R-CARBON;2.4KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R615	2001-000800	R-CARBON;5.1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R618	2001-000010	R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R619	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R620	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R621	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R622	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R623	2001-000019	R-CARBON(S);10OHM,5%,1/2W,AA,TP,2.4X6.4M	
.....5 R624	2001-000019	R-CARBON(S);10OHM,5%,1/2W,AA,TP,2.4X6.4M	
.....5 R625	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R626	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R629	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R707	2001-001035	R-CARBON;91OHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R801	2003-000586	R-METAL OXIDE(S);22Kohm,5%,2W,AF,TP,4x12	
.....5 R802	2003-000586	R-METAL OXIDE(S);22Kohm,5%,2W,AF,TP,4x12	
.....5 R803	2001-001150	R-CARBON(S);470KOHM,5%,1/2W,AA,TP,2.4X6.	
.....5 R804	2001-001150	R-CARBON(S);470KOHM,5%,1/2W,AA,TP,2.4X6.	
.....5 R806	2001-000019	R-CARBON(S);10OHM,5%,1/2W,AA,TP,2.4X6.4M	
.....5 R807	2001-001170	R-CARBON(S);6.8OHM,5%,1/2W,AA,TP,2.4X6.4	
.....5 R809	2001-000109	R-CARBON(S);47OOHM,5%,1/2W,AA,TP,2.4X6.4	
.....5 R810	2001-001192	R-CARBON(S);820OHM,5%,1/2W,AA,TP,2.4X6.4	
.....5 R812	2001-001078	R-CARBON(S);15KOHM,5%,1/2W,AA,TP,2.4X6.4	
.....5 R813	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R814	2001-000563	R-CARBON;27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R815	2008-000294	R-FUSIBLE(S);33ohm,5%,2W,AF,TP,3.9x10mm	
.....5 R816	2901-000297	FILTER-EMI ON BOARD;-,3A,-,-,3.5x5,TP,-	
.....5 R817	2001-000117	R-CARBON(S);68OHM,5%,1/2W,AA,TP,2.4X6.4M	
.....5 R818	2003-000998	R-METAL OXIDE;300ohm,5%,2W,AF,TP,3.9x10m	
.....5 R819	2003-002064	R-METAL OXIDE;7.5ohm,5%,2W,AF,TP,10x3.9m	
.....5 R820	2003-002064	R-METAL OXIDE;7.5ohm,5%,2W,AF,TP,10x3.9m	
.....5 R821	2003-002064	R-METAL OXIDE;7.5ohm,5%,2W,AF,TP,10x3.9m	
.....5 R822	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R823	2004-001390	R-METAL(S);1Kohm,2%,1/2W,AA,TP,2.4x6.4mm	
.....5 R824	2004-001371	R-METAL(S);1.5Kohm,1%,1/2W,AA,TP,2.4x6.4	
.....5 R825	2001-001131	R-CARBON(S);33KOHM,5%,1/2W,AA,TP,2.4X6.4	
.....5 R826	2004-001983	R-METAL(S);2.49Kohm,1%,1/2W,AA,TP,2.4x6.	
.....5 R827	2004-001399	R-METAL(S);5.1Kohm,1%,1/2W,AA,TP,2.4x6.4	
.....5 R828	2004-001390	R-METAL(S);1Kohm,2%,1/2W,AA,TP,2.4x6.4mm	
.....5 R829	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R830	2003-000586	R-METAL OXIDE(S);22Kohm,5%,2W,AF,TP,4x12	
.....5 R831	2003-000586	R-METAL OXIDE(S);22Kohm,5%,2W,AF,TP,4x12	
.....5 R832	2003-001035	R-METAL OXIDE(S);27ohm,5%,2W,AF,TP,3.9x1	
.....5 R833	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
.....5 R834	2004-001889	R-METAL(S);127Kohm,1%,1/2W,AA,TP,2.5x6.5	
⚠ 5 RP801S	2002-001010	R-COMPOSITION;1.8Mohm,5%,1/2W,AA,TP,3.7x	
⚠ 5 RR01S	2008-000206	R-FUSIBLE(S);1ohm,5%,1/2W,AF,TP,2.5x6.5m	
⚠ 5 RR02S	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
⚠ 5 RR03S	2001-001128	R-CARBON(S);30KOHM,5%,1/2W,AA,TP,2.4X6.4	
⚠ 5 RR04S	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
⚠ 5 RR05S	2004-001382	R-METAL(S);13Kohm,1%,1/2W,AA,TP,2.4x6.4m	
⚠ 5 RR07S	2001-000066	R-CARBON(S);10KOHM,5%,1/2W,AA,TP,2.4X6.4	
⚠ 5 RR401S	2004-001390	R-METAL(S);1Kohm,2%,1/2W,AA,TP,2.4x6.4mm	
⚠ 5 RY801S	2002-001013	R-COMPOSITION;4.7Mohm,5%,1/2W,AA,TP,3.7x	
.....5 SW202	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP	
.....5 SW203	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP	
.....5 SW204	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP	
.....5 SW205	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP	
.....5 SW206	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP	
⚠ 5 VX801S	1405-000152	VARISTOR;560V,2500A,14x8.5mm,TP	
.....5 X201	2801-003433	CRYSTAL-UNIT;12MHZ,30PPM,28-AAM,30PF,30O	
.....5 X601	2801-000186	CRYSTAL-UNIT;18.432MHz,25ppm,28-AAM,8pF,	
.....5 Z202	2903-000129	FILTER-CERAMIC;BR,4.5MHz,-,-,-,TP,-	

ASSY CABINET(COM)

1	*	AA92-00549D	ASSY CABINET(COM);CM27001SDS/KMT	S.N.A
..2	BACK	AA60-00091J	SPACER-FELT;-,FELT,330X10,-,-,BLK,T0.5,-	S.N.A
..2	CB+CF	AA60-10050T	SCREW-TAPPING;-,SWRCH18A,M4,L20,RH,+,2S,	S.N.A
..2	CB+RCA	AA60-10050T	SCREW-TAPPING;-,SWRCH18A,M4,L20,RH,+,2S,	S.N.A
..2	CRT+CF	AA60-10050R	SCREW-ASSY;-,SWRCH18A,M5,L31.5,HH,+,WC,-	S.N.A
..2	D-COIL	AA65-30113A	CLAMP-D,COIL;-,NYLON 66,V2,-,BLK,TVI 25~	S.N.A
..2	D-COIL	AA65-30017A	CLAMP-D,COIL;-,NYLON-66,V0,-,NTR,DADH300	S.N.A
..2	PA+CF	6006-001095	SCREW-ASS'Y TAPT;WP,BH,+,M4,L12,ZPC(YEL)	S.N.A
..2	SPK+CF	6003-001026	SCREW-TAPTITE;RH,+,B,M4,L15,ZPC(BLK),SWR	S.N.A
..2		AA65-30008A	CLAMP-CORD;-,PE,HB,-,BLK,-	S.N.A
..2		AA61-00356B	HOLDER-TUNER,F/JACK;501F,ABS,-,-,-,BLK,H	S.N.A
..2		AA63-60004G	SPACER-GUM,CRT;-,NTR RUBBER,-,-,-,GRY,T3	S.N.A
..2		AA64-00892C	INLAY BACK;D2,PS SHEET,T0.3,-,-,BLK,RCA6	S.N.A
..2		AA64-31149A	CABINET-BACK;683B,HIPS,-,-,-,V0,BLK,-	S.N.A

ASSY CABINET FRONT

1	*	AA92-00553D	ASSY CABINET FRONT;CM27001SDS/KMT	S.N.A
..2	KC+CF	6003-001026	SCREW-TAPTITE;RH,+,B,M4,L15,ZPC(BLK),SWR	S.N.A
..2	KNOPOW	AA61-60003J	SPRING-CS;-,SUS304,-,-,OD6,N7,OD6,-,-,-,	S.N.A
..2		AA64-31148A	CABINET-FRONT;683B,HIPS,-,-,-,V0,BLK,-	S.N.A
..2		AA64-40472A	WINDOW-REMOCON;-,683B,-,ABS,HB,LG 41338,	S.N.A
..2		AA64-40473A	INDICATOR-LED;683B,PMMA,-,CLEAR,HB,-,-	S.N.A
..2		AA65-30105A	CLAMP-WIRE;ALL MODEL,NYLON 66,V2,-,NTR,1	S.N.A
..2		AA64-10733A	KNOB-POWER;683B,ABS,-,-,-,HB,BLK,-,-	S.N.A
..2		AA61-40010B	BOSS-WING;-,HIPS,-,-,-,BLK,V0	
..2		AA64-02281A	BADGE-BRAND;27V,AL FORGING,SILVER,C/MATH	S.N.A
..2		AA64-10732A	KNOB-CONTROL;683B,ABS,-,-,-,HB,BLK,-,-	S.N.A

ASSY-SKD

1	*	AA97-00722N	ASSY-SKD;,CM27001SDS/KMT,KS1B,NTSC	S.N.A
..2		AA65-30104C	CLAMP-WIRE;ALL MODEL,NYLON 66,V2,-,NTR,W	S.N.A
..2		AA27-00208A	COIL DEGAUSSING;-,27V,2.8MH,10%,30T,1.5#	
..2		AA65-30018A	CLAMP-WIRE;DONG-A,NYLON-66,-,-,-,DATL-60	S.N.A
..2		AA65-30009A	CLAMP-FBT;-,ABS,V0,-,BLK,-	S.N.A

ASSY SPEAKER

1	*	AA96-00809A	ASSY SPEAKER;,8OHM,5W,AA39-20505N,350,55	S.N.A
..2		3001-001071	SPEAKER;5W,8ohm,90dB,180Hz	
..2		AA39-20505N	LEAD CONNECTOR-ASSY;,4P,YSH025-04,REC,35	

ASSY-POWER,CORD

⚠ 1	*	AA96-20129A	ASSY-POWER,CORD;-,EP2/YES,H/C300,ME301P,	S.N.A
..2		3811-000401	WIRE-PVC CU;BCWA,300V,ROLL,17/0.16mm,#22	
..2		AA61-20284A	HOLDER;P-CORD,PP,-,-,-,BLK,VO,KE-002	
..2		AA39-10007Y	POWER-CORD;-,EP2/YES,SPT-2 18AWGx2C,2.4m	

ASSY CRT

⚠ 1	*	AA97-00700B	ASSY CRT;-,-,27,-,SAM2740,-	S.N.A
..2		AA03-00147A	CRT COLOR;A68QDN891X001,29,1.0R,42.5%,+3	

ASSY PACKING

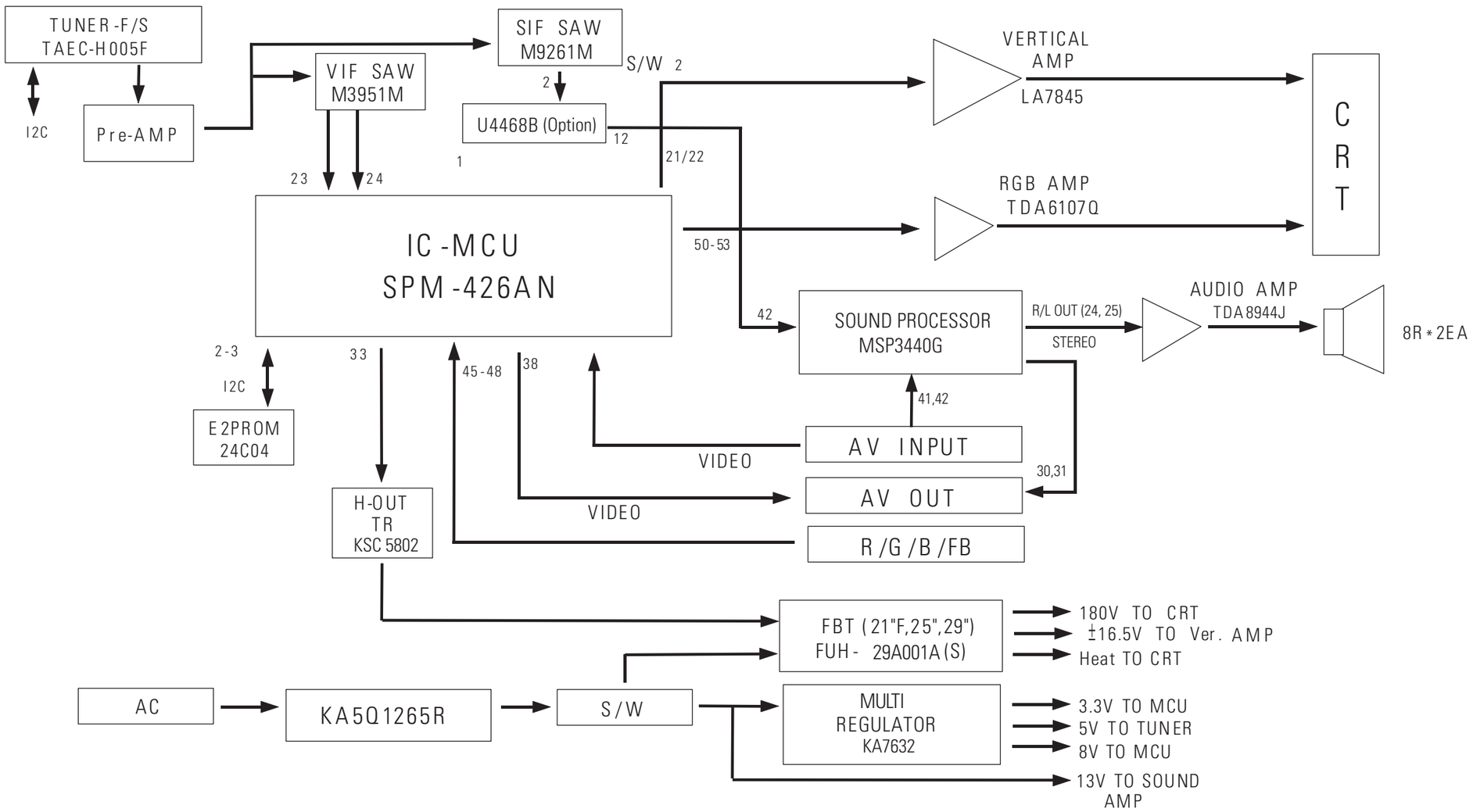
1	*	AA92-00445H	ASSY PACKING;CM27001SDS/KMT	
..2		AA68-01962A	MANUAL USERS;,ENG,B5,W/P100(G),48PAGE,KS	S.N.A

Loc. No.		Code No.	Description ; Specification	Remark
			ASSY TBC WIRE(P)	
1	*	AA98-00192A	ASSY TBC WIRE(P);-,29INCH,NTSC,2PWH-1P,K	S.N.A
			REMOCON	
1	*	AA59-10111E	REMOCON;,TM59,SZM386ET,24,G6671B,CURTISM	

MEMO

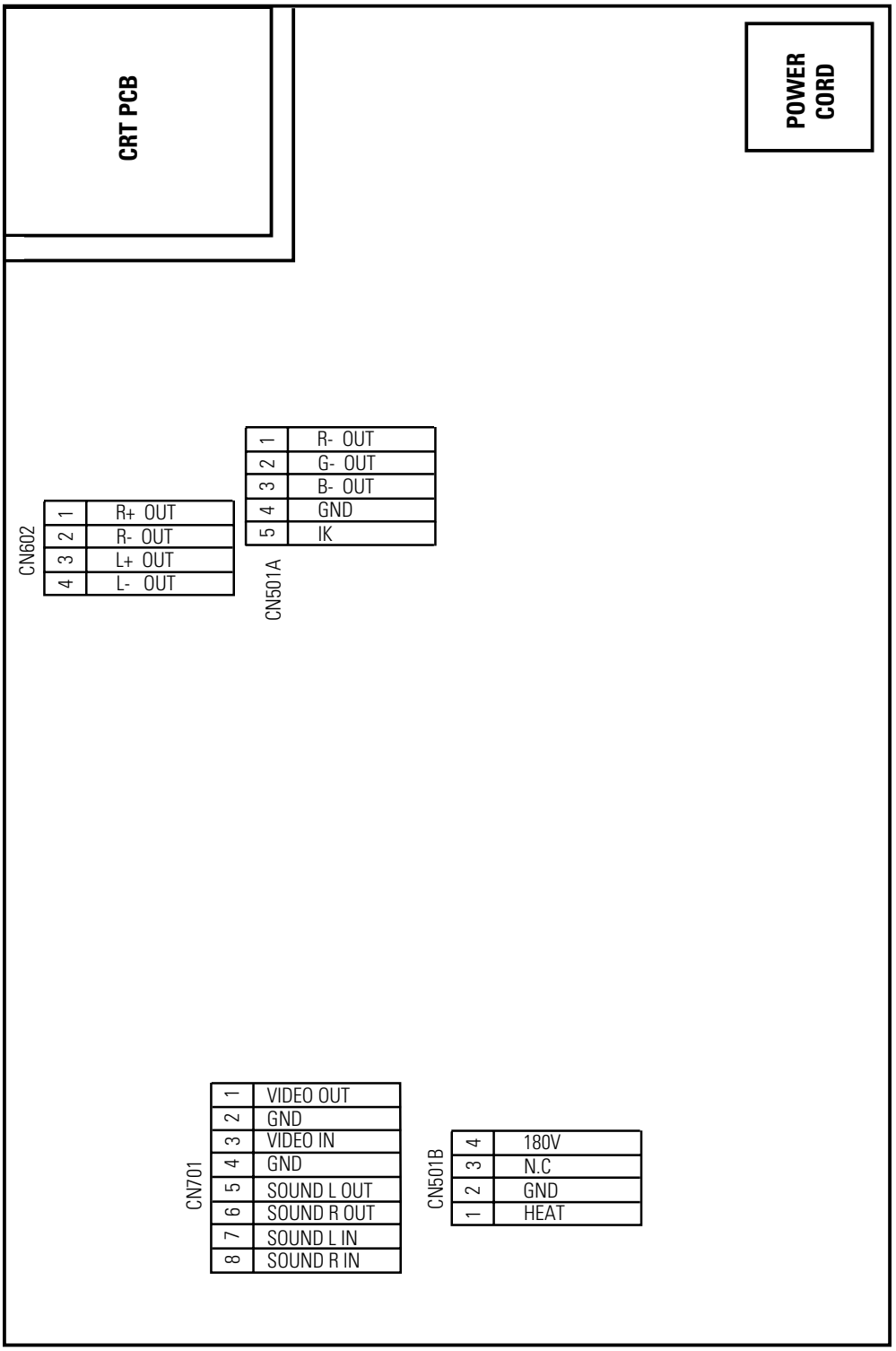
8. Block Diagram

8-1 KS1B



9. Wiring Diagram

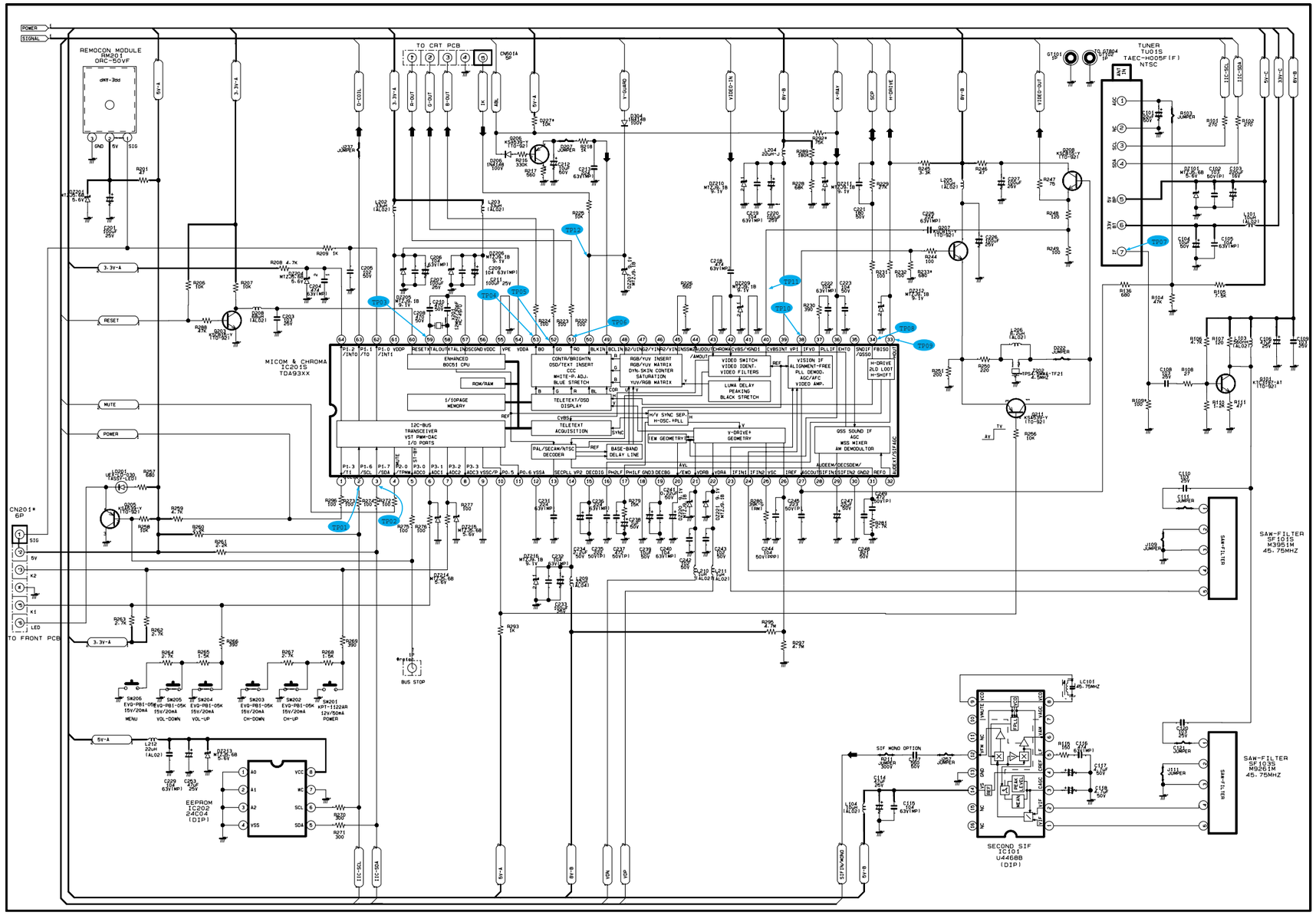
9-1 KS1B



MEMO

10. Schematic Diagrams

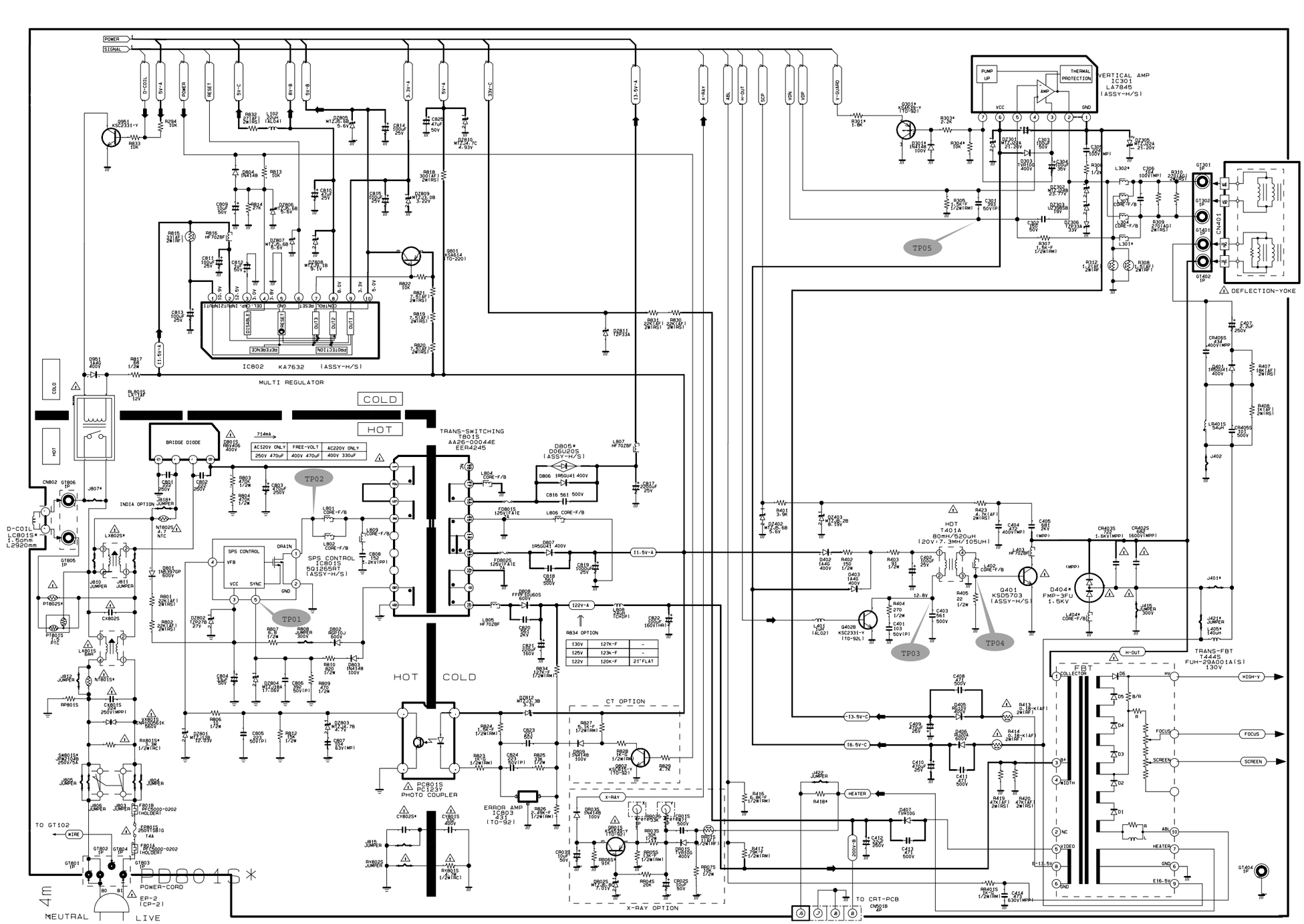
10-1 MAIN(1/3)

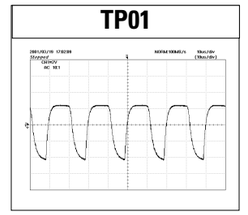


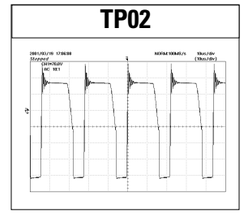
: Power Line

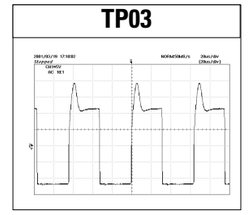
: Signal Line

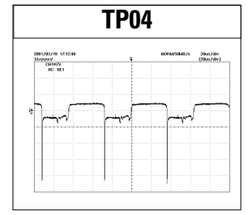
10-2 MAIN(2/3)

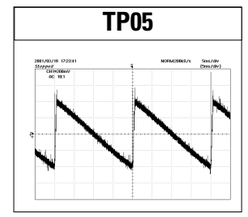

POWER
SIGNAL
IC802 KA7632 (ASSY-H/S)
MULTI REGULATOR
COLD
HOT
TRANS-SWITCHING
T801S
AA26-00044E
EER4245
PC801S
PC123Y
PHOTO COUPLER
SPS CONTROL
IC801S
5Q1265RT
(ASSY-H/S)
ERROR AMP
IC803
S431
(TO-92)
VERTICAL AMP
IC301
LA7845
(ASSY-H/S)
HDT
T401A
80MH/520UH
(20V-7.3MH/105UH)
FBT
T4445
FUH-29A001A(S)
130V
DEFLECTION-YOKE
CT OPTION
X-RAY OPTION
TO GT102
TO CRT-PCB
INDIA OPTION JUMPER
BRIDGE DIODE
POWER-CORD
EP-2
(CP-2)
MEUTRAL
LIVE
TP01
TP02
TP03
TP04
TP05
: Power Line
: Signal Line


TP01

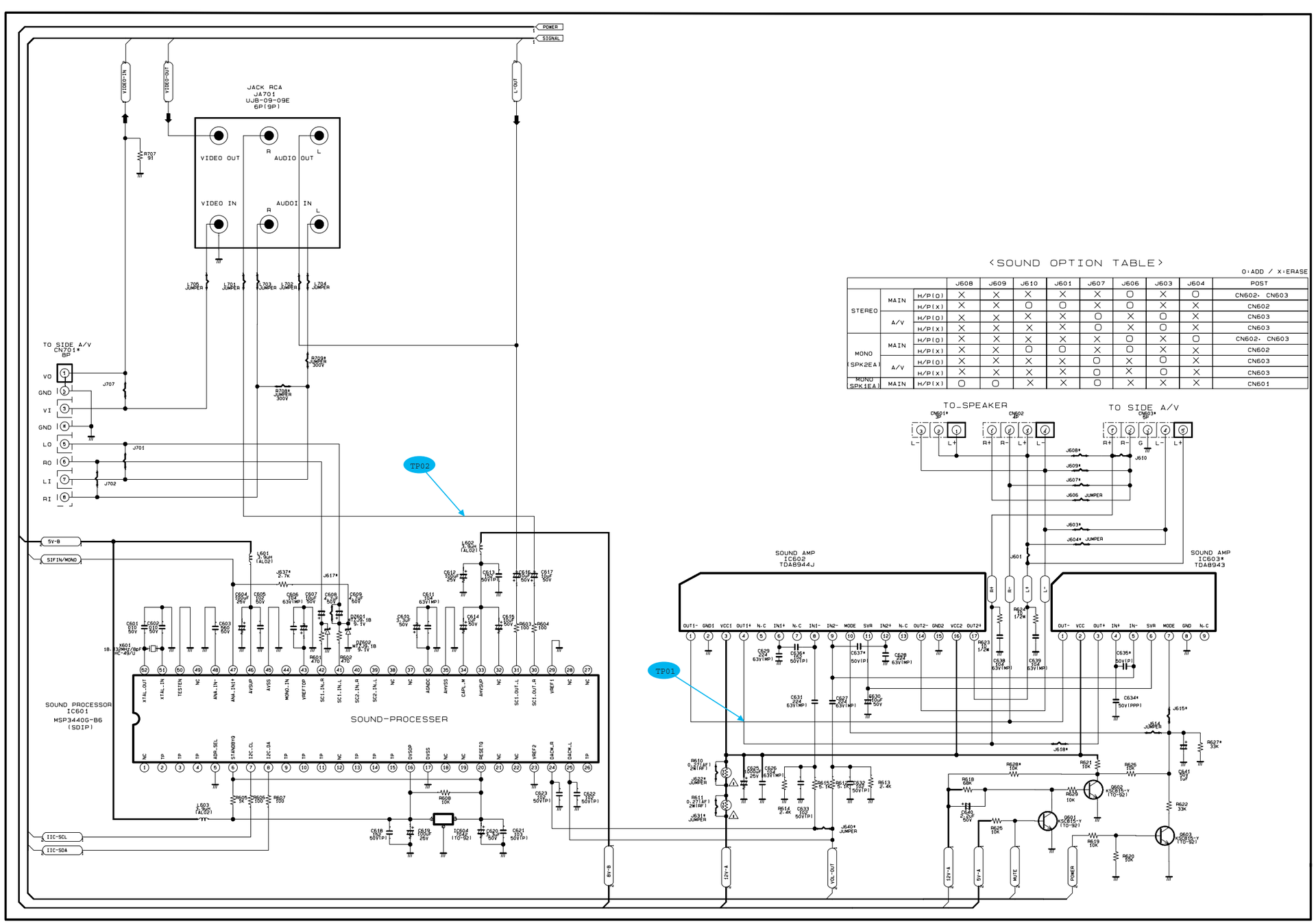

TP02


TP03

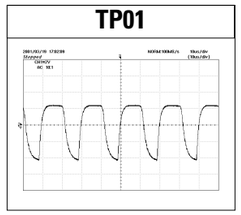

TP04


TP05

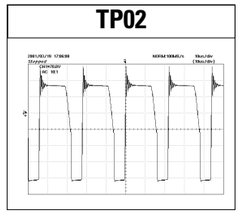
10-3 MAIN(3/3)



TP01



TP02



<SOUND OPTION TABLE>

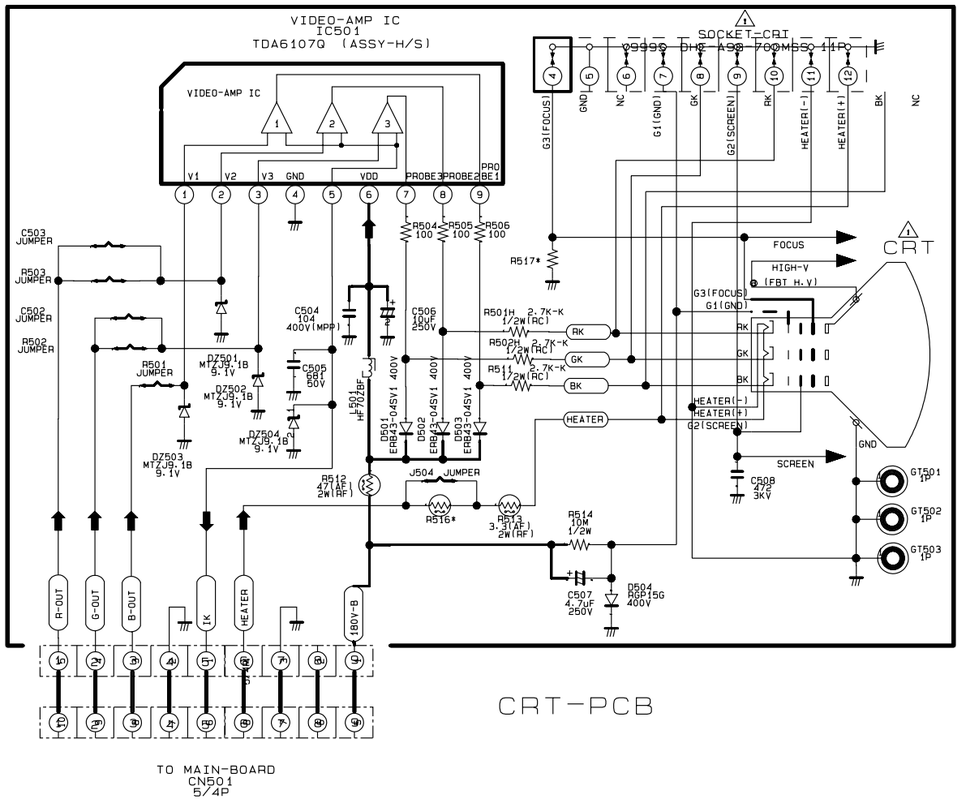
O:ADD / X:ERASE

			J608	J609	J610	J601	J607	J606	J603	J604	POST
STEREO	MAIN	H/P(O)	X	X	X	X	X	O	X	O	CN602, CN603
		H/P(X)	X	X	O	O	X	O	X	X	CN602
	A/V	H/P(O)	X	X	X	X	O	X	O	X	CN603
		H/P(X)	X	X	X	X	O	X	O	X	CN603
MONO (SPK2EA)	MAIN	H/P(O)	X	X	X	X	X	O	X	O	CN602, CN603
		H/P(X)	X	X	O	O	X	O	X	X	CN602
	A/V	H/P(O)	X	X	X	X	O	X	O	X	CN603
		H/P(X)	X	X	X	X	O	X	O	X	CN603
MONO SPK1EA)	MAIN	H/P(X)	O	O	X	X	O	X	X	X	CN601

: Power Line

: Signal Line

10-4 CRT


VIDEO-AMP IC
IC501
TDA6107Q (ASSY-H/S)
SOCKET-CRT
CRT
CRT-PCB
TO MAIN-BOARD
CN501
5/4P
FOCUS
HIGH-V
(FBT H.V)
SCREEN
GND
HEATER
R-OUT
G-OUT
B-OUT
1K
HEATER
180V-B